

CITY OF HOUSTON INVITATION TO BID

Issued: June 16, 2017

BID OPENING

Sealed bids (labelled with the company name, address and bid number), in duplicate, will be received by the City Secretary of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, until **10:30 a.m., Thursday, July 13, 2017** and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 AM on that date for the purchase of:

LOW AND MEDIUM VOLTAGE ELECTRIC MOTOR REPAIR SEVICES FOR THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING BID INVITATION NO.: \$74-L26288

NIGP CODE: 929-61

BUYER

Questions regarding this solicitation document should be addressed to Elnora Williams at 832.393.0209, or e-mail to Elnora.Williams@houstontx.gov.

ELECTRONIC BIDDING

In order to submit a bid for the items associated with this procurement, vendor must fill in the pricing information on the "PLACE BID" page.

PRE-BID CONFERENCE

A Pre-Bid Conference will be held for all Prospective Bidders at 901 Bagby Houston, Texas 77002 City Hall Basement, SPD Conference Room-# 2 at 10:00 a.m. on June 27, 2017.

All Prospective Bidders are urged to be present. It is the Bidder's responsibility to ensure that they have secured and thoroughly reviewed the solicitation documents prior to the Pre-Bid Conference. Any revisions to be incorporated into this solicitation document arising from discussions before, during and subsequent to the Pre-Bid Conference will be confirmed in writing by Letter(s) of Clarification prior to the bid due date. Verbal responses will not otherwise alter the specifications, and terms and conditions as stated herein.

Bidding forms, specifications, and all necessary information should be downloaded from the Internet at https://purchasing.houstontx.gov/. By registering and downloading this solicitation document, all updates to this solicitation document will be automatically forwarded via e-mail to all registered Bidders. This information may also be obtained from the Supplier Assistance Desk, Strategic Purchasing Division, 901 Bagby (Concourse Level), Houston, Texas 77002.

The place of the bid opening may be transferred in accordance with Paragraph (b), (5) of Section 15-3 of The Code of Ordinances, Houston, Texas. The bid opening meeting may be rescheduled in accordance with Paragraph (b), (6) of said Section 15-3.

The City reserves the right to reject any or all bids or to accept any bid or combination of bids deemed advantageous to it.

City Employees are prohibited from bidding on this solicitation in accordance with the Code of Ordinances, Section 15-1.

*CONTENTS:

SECTION A: OFFER

SECTION B: SCOPE OF WORK/SPECIFICATIONS SECTION C: GENERAL TERMS & CONDITIONS

*NOTE 1: Actual page numbers for each Section may change when the solicitation document is downloaded from the Internet or because of Letters of Clarification. Therefore, Bidders must read the bid document in its entirety and comply with all the requirements set forth therein.

*NOTE 2: To be considered for award, please submit the electronic bid form and the forms listed in Section A, <u>including the Official Signature Page</u>, which must be signed by a company official authorized to bind the company.

SECTION A



LOW AND MEDIUM VOLTAGE ELECTRIC MOTOR REPAIR SERVICES FOR THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING BID INVITATION NO.: \$74-L26288 NIGP CODE: 929-61

To The Honorable Mayor and Members of the City Council of the City of Houston (the "City"), Texas:

The undersigned Bidder hereby offers to contract with the City upon the terms and conditions stated in that certain "Contract for low and medium voltage electric motor repair services for three-year period with two (2) one-year option periods to extend for the Department of Public Works and Engineering," which was distributed by the City together with the "Notice to Bidders" and is hereby incorporated herein by this reference (the "contract"). This offer is made at the prices stated on the electronic bid form. When issued by the City of Houston, Letters of Clarification shall automatically become part of this bid document and shall supersede any previous specifications or provisions in conflict with the Letters of Clarification. It is the responsibility of the Bidder to ensure that it has obtained all such letters. By submitting a bid on this project, Bidder shall be deemed to have received all Letters of Clarification and to have incorporated them into its bid.

The City may accept this bid offer by issuance of a contract covering award of said bid to this Bidder at any time on or before the 180th day following the day this Official Bid Form is opened by the City. This offer shall be irrevocable for 180 days, but shall expire on the 181st day unless the parties mutually agree to an extension of time in writing.

The City of Houston reserves the option, after bids are opened, to increase or decrease the quantities listed, subject to the availability of funds, and/or make award by line item.

If the City accepts the foregoing offer, this Bidder promises to deliver to the City Chief Procurement Officer of the City, five (5) original counterparts of said contract duly executed by this Bidder (as "Contractor") in accordance with this paragraph, proof of insurance as outlined in Article II of the contract, all on or before the tenth (10th) day following the day this Bidder receives from the City the unsigned counterparts shall be executed so as to make it binding upon the Bidder, and all of the applicable requirements stated in the document entitled "Instructions for Execution of Contract Documents," (which was distributed by the City) shall be complied with.

The City reserves the right to cancel this ITB, accept or reject, in whole or in part, any or all bids received and to make award on the basis of individual items or combination of items, as it is deemed in the best interest of the City.

If the City accepts the foregoing offer, this Bidder shall furnish all labor, supervision, materials, supplies, equipment and tools necessary to provide **Low and Medium Voltage Electric Motor Repair Services** for the City in accordance with attached specifications.

Additional Required Forms to be included with this Bid:

In addition to the Electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due. When submitting bids via UPS/FedEx, etc. please label it with the name: Office of the City Secretary. City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, along with the bid/proposal number:

TABLE 1 - REQUIRED FORMS
Affidavit of Ownership
Fair Campaign Ordinance
Statement of Residency
M/WBE
Conflict of Interest Questionnaire
Pay or Play Program Acknowledgement Form
Pay or Play Certification of Agreement to Comply w' the Program
Contractor's Qualification Questionnaire
Hire Houston First Application and Affidavit

Note: Submission of the Contractor's Qualification Questionnaire is mandatory for bid to be considered. Failure to properly complete and submit, shall be cause for bid to be rejected.

Table 2 lists other documents and forms that should be viewed/downloaded from the City's website, but are not required to be submitted with the bid. The City will request these forms, as applicable, to be completed and submitted to the City by the recommended/successful bidder:

TABLE 2 - DOCUMENTS & FORMS
Drug Forms
EEOC
Formal Instructions for Bid Terms
Sample Insurance Over \$50,000
Insurance Endorsements
Pay or Play Office of Business Opportunity &
Contract Compliance Q & A
Pay or Play Office of Business Opportunity &
Contract Compliance Requirements
Pay or Play Contractor/Subcontractor Payment
Reporting Form
Pay or Play Contractor/Subcontractor Waiver
Request
Pay or Play List of Participating Subcontractors
Criminal Justice Information Services (CJIS)
Compliance Addendum (Applicable to Houston Police
Department (HPD) Occupied Facilities)

Questions concerning the bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Room B-400, Houston, TX 77002, Attn: Elnora Williams or by e-mail (preferred method) to Elnora.Williams@houstontx.gov, no later than 2:00 p.m., Thursday, June 29, 2017.

CONTRACTOR'S QUALIFICATION QUESTIONNAIRE

COMPLETE AND SUBMIT WITH BID

Please attach additional paper if necessary

FIRM HISTORY: List firm history below including any other business names used

From	То	Firm Name	
From	То	Firm Name	
From	То	Firm Name	
From	То	Firm Name	
From	То	Firm Name	
From	То	Firm Name	

PRINCIPALS IN FIRM AND YEARS OF EXPERIENCE WITH LOW AND MEDIUM MOTOR REPAIRS

Name	Title	Phone	No. of Years

To be eligible for award consideration, the bidder must be able to demonstrate satisfactory proof of capacity and ability to perform the services herein required. Such proof may include but is not limited to: inspection of bidder facility and equipment, references and performance of similar contracts.

- 1. Bidder must submit a maximum of five (5) and a minimum of two (2) successful projects that best demonstrates experience as a prime contractor, for Low and/or Medium Voltage Electric Motor Repair Services, that is similar in size and scope to the services required.
- a. The experience must have occurred within the last five (5) years, measured backwards from the issue date of this solicitation.
- b. Bidder must have references documenting that it has performed Low and/or Medium Electric Voltage Repair Services. The reference(s) and projects should be included in the space provided below.
- 2. Consideration will be given only to bidders who can demonstrate that their background and technical abilities/competence comply with the specifications. Qualifications and or experience must meet the minimum required for this specification, outlined in this questionnaire and/or listed in the scope of work specifications.

Solicitation No: S74-L26288: Low and Medium Voltage Electric Motor Repair Services

3. Bidder must submit sample technical specifications, reports and/or checklist showing its work flow process and method of approach for carrying out the proposed services. City of Houston shall have sole responsibility and rights for determining from the information submitted if proposed work meets specifications.

ELECTRICAL MOTOR REPAIR CAPABILITIES Firm's Average Annual Repair Volumes: \$ Electric Motor Inspection Rewind Repair % Recondition Repair % **EXPERIENCE RECORD:** Project Description: Project Location: Contract Amount | Beginning: \$ Ending: \$ Project Owner: Address: City: State: Email/Fax: Project Owner's Phone: Representative familiar with project: Contract Start Date: Contract Duration (calendar days) If project currently If completed, date: ongoing, provide percentage complete contract extensions were added to contract, as a result of Bidder responsibilities. provide short explanation of each: Proiect Description and why comparable

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to this contract:

EXPERIENCE RECORD (CONTINUED)

2.

Project Description:				
Project Location:	Contract Amount	ontract Amount Beginning: \$ Ending: \$		Ending: \$
Project Owner:	Address:			
City:	State:			
Project Owner's	Phone:		Email/F	ax:
Representative				
familiar with project:				
Contract Start Date:	Contract Duration	(calendar d	lays):	
If project currently	If completed, date:			
ongoing, provide				
percentage complete				
If contract time				
extensions were				
added to contract, as				
a result of Bidder				
responsibilities,				
provide short				
explanation of each:				
Project Description				
and why comparable				
to this contract:				

3.

Project Description:						
Project Location:	Contract Amount	Beginning: \$	Ending: \$			
Project Owner:	Address:	Address:				
City:	State:					
Project Owner's	Phone:	Phone: Email/Fax:				
Representative						
familiar with project:						
Contract Start Date:	Contract Duration	Contract Duration (calendar days):				
If project currently	If completed, date	:				
ongoing, provide						
percentage complete						
If contract time						
extensions were						
added to contract, as						
a result of Bidder						
responsibilities,						
provide short						
explanation of each:						
Project Description						
and why comparable						
to this contract:						

EXPERIENCE RECORD (CONTINUED)

4.

Project Description:					
Project Location:	Contract Amount Beginning: \$ Ending: \$		Ending: \$		
Project Owner:	Ado	Address:			
City:	Sta	te:			
Project Owner's	Pho	one:	En	nail/Fax:	
Representative					
familiar with project:					
Contract Start Date:	Cor	ntract Duration (d	calendar days	s):	
If project currently	If co	If completed, date:			
ongoing, provide					
percentage complete					
If contract time					
extensions were					
added to contract, as					
a result of Bidder					
responsibilities,					
provide short					
explanation of each:					
Project Description					
and why comparable					
to this contract:					

5.

Project Description:					
Project Location:	Contract Amount	Beginning: \$	Ending: \$		
Project Owner:	Address:				
City:	State:	State:			
Project Owner's	Phone:	Phone: Email/Fax:			
Representative					
familiar with project:					
Contract Start Date:	Contract Duration	(calendar days):			
If project currently	If completed, date	:			
ongoing, provide					
percentage complete					
If contract time					
extensions were					
added to contract, as					
a result of Bidder					
responsibilities,					
provide short					
explanation of each:					
Project Description					
and why comparable					
to this contract:					

BIDDER FACILITY AND INSPECTION

- 1. The City of Houston reserves the right to inspect the bidder's current place of business to evaluate equipment condition and capabilities, staff experience, training and capabilities as well as storage capabilities as they relate to the performance of this contract.
- 2. The City intends to inspect the work on its equipment during the course of the repair. This facility shall be equipped to provide the services specified and shall be staffed with qualified personnel. This requirement shall apply to all sub-contractors that will perform work related to this contract for the contractor.
- 3. The facility must meet requirements at the time the city performs the inspection in order to be considered for award.
- 4. The successful bidder shall maintain a repair facility that allows monitoring and inspection of the Contractor's work by the City's User Department Representative (UDR). If the Contractor's facility is outside of the Harris County line, the Contractor shall be responsible for UDRs' travel expenses to the Contractor's facilities to monitor and inspect the jobs in progress and the contractor shall reimburse the City of Houston accordingly. Travel expenses shall be based on the city's current per diem travel costs.
- 5. The facility shall meet all Federal, State, Building Codes, regulations of Fire Department, City of Houston and/or local regulations, ordinances, codes, and standards, which govern such facilities and the equipment therein.
- 6. The Contractor shall furnish the City Inspection Team valid documents indicating that the facility meets the current OSHA, safety requirements, current EPA, and TNRCC requirements for air and water pollution as related to the equipment at the facility.
- 7. The facility shall have an area designated as storage area for safe storage of the motors and components under repair. This area shall be weather protected and isolated from teardown, sandblasting, steam cleaning and similar sources of contaminants that could damage the motor and components. The storage area shall be at the Contractor's shop.
- **8.** The bidder and its sub-contractors must be ready for the City "Inspection Team" within 72 hours of a notice by the City's Purchasing Agent.

BID SELECTION PROCESS

- 1. Should the apparent lowest bidder fail to meet the requirements of the specifications, as determined by the City of Houston's review of bidder's experience and qualifications, the bidder shall be rejected and the next lowest bid reviewed for responsiveness.
- 2. Bidders will not be allowed to submit experience and qualification documentation a second time, but additional supplemental information may be submitted upon the City's request. The City may make such investigations as necessary to determine the ability of the bidder to perform the work, and reserves the right to reject any bid if the evidence submitted and/or obtained through investigation fails to satisfy the City that the bidder is sufficiently qualified to carry out the obligations required under this agreement.

SITE INSPECTION

The City of Houston reserves the right to inspect the Bidder's current place of business to evaluate equipment condition and capabilities, staff experience, training and capabilities, and storage capabilities as they relate to the performance of this contract.

QUALITY AND WORKMANSHIP

The Bidder must be able to demonstrate upon request that it has satisfactorily performed services similar to the services specified herein. The Bidder will provide records of warranty and repair services upon request by City. The City of Houston shall be the sole judge as to whether the services performed are similar to the scope of services contained herein and whether the Bidder is capable of performing such services.

PROTEST:

A protest shall comply with and be resolved, according to the City of Houston Procurement Manual http://purchasing.houstontx.gov/docs/Procurement_Manual.pdf and rules adopted thereunder. Protests shall be submitted in writing and filed with both, the City Attorney and the Solicitation contact person. A pre-award protest of the ITB shall be received five (5) days prior to the solicitation due date and a post-award protest shall be filed within five (5) days after City Council approval of the contract award.

A protest shall include the following:

- The name, address, e-mail, and telephone number of the protester;
- The signature of the protester or its representative who has the delegated authority to legally bind its company;
- Identification of the ITB description and the ITB or contract number;
- A detailed written statement of the legal and factual grounds of the protest, including copies of relevant documents, etc.; and
- The desired form of relief or outcome, which the protester is seeking

NO CONTACT PERIOD:

Neither bidder(s) nor any person acting on bidder(s)'s behalf shall attempt to influence the outcome of the award by the offer, presentation or promise gratuities, favors, or anything of value to any appointed or elected official or employee of the City of Houston, their families or staff members. All inquiries regarding the solicitation are to be directed to the designated City Representative identified on the first page of the solicitation. Upon issuance of the solicitation through the pre-award phase and up to the award, aside from bidder's formal response to the solicitation, communications publicly made during the official prebid conference, written requests for clarification during the period officially designated for such purpose by the City Representative, neither bidder(s) nor persons acting on their behalf shall communicate with any appointed or elected official or employee of the City of Houston, their families or staff through written or oral means in an attempt to persuade or influence the outcome of the award or to obtain or deliver information intended to or which could reasonably result in an advantage to any bidder. However, nothing in this paragraph shall prevent a bidder from making public statements to the City Council convened for a regularly scheduled session after the official selection has been made and placed on the City Council agenda for action, or to a City Council committee convened to discuss a recommendation regarding the solicitation.

HIRE HOUSTON FIRST

Designation as a City Business or Local Business

To be designated as a City or Local Business for the purposes of the Hire Houston First Program, as set out in Article XI of Chapter 15 of the Houston City Code, a bidder or proposer must submit the **Hire Houston First Application and Affidavit ("HHF Affidavit")** to the Director of the Mayor's Office of Business Opportunities and receive notice that the submission has been approved prior to award of a contract. Bidders are encouraged to secure a designation prior to submission of a bid or proposal if at all possible.

Download the HHF Affidavit from the Office of Business Opportunities Webpage at the City of Houston e-Government Website at the following location:

http://www.houstontx.gov/hbsc/hirehoustonfirstaffidavit.pdf

Award of a Procurement of \$100,000 or More for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A "CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

Award of Procurement under \$100,000 for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A "CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

Award of Procurement that may be More or Less than \$100,000 for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A "CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE CITY BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE CITY BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

<u>Award of Procurement of \$100,000 or More for Purchase of Non-Professional Services , Including</u> Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE LOCAL BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

<u>Award of Procurement under \$100,000 Purchase of Non-Professional Services Including Construction Services:</u>

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED N SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

<u>Award of Procurement that may be More or Less than \$100,000 for Purchase of Non-Professional</u> Services, Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE LOCAL BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE LOCAL BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

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1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES

- 1.1 The Contractor shall furnish all supervision, labor, parts, tools, materials, equipment, supplies, and facilities necessary to provide precision repair services for vertical, horizontal squirrel-cage induction, wound-rotor induction, AC, DC or synchronous motors for the Public Works and Engineering Department of the City of Houston. The City will monitor all repair or replacement of motors on a daily basis.
- 1.2 The rated voltages of the motors are as follows:
 - 1.2.1 single-phase (low voltage) 120, 230, and three-phase 230, 460 volts alternating current (AC) with sizes from fractional horsepower (HP) to 500 HP.
 - 1.2.2 There-phase 2300/4160/7200 volts AC with sizes from 75 HP to 2750 HP.
 - 1.2.3 They are grouped as Group-I, Group-II, and Group-III to indicate the size of the units-(per the Bid Form).
- 1.3 This specification shall cover the general requirements for the reconditioning, rewinding, repairing, replacing and testing of the motors. This includes, but is not limited to, assembled motors, stator coils, stator iron, bearings, and general mechanical work. These specifications defines minimum acceptable requirements for motor repair, replacement, and required documentation.
- 1.4 Unless otherwise specified, fabrications, processes, parameters, and test methods shall conform to the latest revision of the following *Electrical Apparatus Service Association (EASA)* documents:
 - 1.4.1 EASA AR100-2010: Recommended Practice for Repair of Rotating Apparatus (hereafter abbreviated as EASA AR100-2010);
 - 1.4.2 EASA Technical Note No. 16: Guidelines for Maintaining Motor Efficiency During Rebuilding, September 1999 (hereafter abbreviated as EASA Tech Note No. 16);
 - 1.4.3 EASA Technical Note No. 17: Stator Core Testing, updated March 1997 (hereafter abbreviated as EASA Tech Note No. 17);
 - 1.4.4 EASA Technical Note No. 23: Testing of Squirrel Cage Rotors, updated October 2003:
 - 1.4.5 EASA Bearing Fit Tolerance Chart, updated 1997;
 - 1.4.6 ASTM E-1934-99a: 2005e1--Standard Guide for Examining Electrical and Mechanical Equipment with Infrared Thermography (herein abbreviated as ASTM E-1934); and
 - 1.4.7 All test equipment required for test results shall be calibrated at least annually against standards traceable to the National Institute of Standards and Technology (NIST), or equivalent standards laboratories (EASA AR 100-2010 Section 4). The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product--to specified requirements.

- 1.5 The Contractor shall furnish copies of current environmental permits and demonstrate compliance with current environmental regulations per the Contract Technical Representative (CTR) request.
- 1.6 The Contractor facility shall be subject to site inspection before award to verify that the equipment deemed necessary is present.
- 1.7 Subcontractors to the Contractor for the performance of work are subject to the same standards as the Contractor.
- 1.8 The electric motors at City facilities are purchased and installed under the City's Master Specifications, Section 15170, Low Voltage Motors, GHWP, dated 3/4/96 or latest edition, and requires compliance with the applicable sections of the following standards and codes: The electric motors at City facilities are purchased and installed under the City's Master Specifications, Section 15171, Medium Voltage Motors, GHWP, dated 6/28/2005 or latest edition, and required compliance with the applicable sections of the following standards and codes.
 - 1.8.1 American National Standard Institute (ANSI);
 - 1.8.2 Anti-Friction Bearing Manufacturing Association (AFBMA);
 - 1.8.3 Institute of Electrical and Electronic Engineers (IEEE);
 - 1.8.4 Forty-three Recommended Practices for Testing Insulation Resistance of Rotating Machinery;
 - 1.8.5 National Electrical Code (NEC);
 - 1.8.6 National Electrical Manufacturers Association (NEMA); and
 - 1.8.7 MG 1: Motors and Generators.
- 1.9 In addition, the following codes and standards shall apply to these repairs:
 - 1.9.1 Steel Structures Painting Council (SSPC);
 - 1.9.2 City of Houston Electrical Code;
 - 1.9.3 American Society for Testing and Materials (ASTM); and
 - 1.9.4 American Society for Non-Destructive Testing.
- 1.10 ALL repairs and services shall be performed to comply with the applicable sections of the above standards and codes.
- 1.11 At the City facilities, the installed electric motors to be purchased in the future shall be manufactured by, but not limited to, the following companies:
 - 1.11.1 General Electric
 - 1.11.2 Reliance Electric
 - 1.11.3 Siemens
 - 1.11.4 Fairbanks-Morse
 - 1.11.5 Toshiba
 - 1.11.6 U.S. Motors
 - 1.11.7 Westinghouse
 - 1.11.8 Gould
 - 1.11.9 Marathon
 - 1.11.10 Baldor

- 1.12 The Contractor shall use new and Original Equipment Manufacturer (OEM) parts (or) approved equal in the repair of its electric motors.
- 1.13 At the Contractor's repair facility, the Contractor shall disassemble the unit, inspect it, and prepare a scope of work to repair and replace parts with *new* OEM parts, or approved equal. The cost of inspection and preparation of the "work scope" shall be a part of the base cost of any Recondition/Repair or Rewind/Repair job.
- 1.14 If the Contractor plans to use any part other than an OEM-specified part, the Contractor shall obtain written permission from the UDR.
- 1.15 Where hourly work is performed on behalf of the City, the Contractor (and subcontractors of the Contractor) shall fully document the start of the work, the time spent on the job, and the completion of each job. The documentation shall be by a punch card/time clock, a shop record or any other mutually-agreed method. (See "Exhibit B-6" time sheet.)
- 1.16 Wherever torque values are known, the Contractor shall use a torque wrench and adhere to the OEM torque values.
- 1.17 If requested by the City's UDR, Contractor shall furnish parts needed for maintenance activities of electric motors by City personnel. Contractor shall charge the same price for these parts as scheduled in the contract Fee Schedule.
- 1.18 The paint booth shall not be used for sandblasting.
- 1.19 Upon receipt of the electric motors, the Contractor shall document all information about the condition of the units, to include photographs.
- 1.20 In the case of dual horsepower units, charges shall be based only on the higher horsepower rating-never on both.
- 1.21 Before disassembly, nameplate data shall be verified. All missing or damaged parts shall be identified in writing, recorded, and special items (conduit box, location, brakes, gears, etc.) shall be noted on the inspection form.
- 1.22 The Contractor shall advise the City's UDR/Contract Technical Representative (CTR) of the name(s) and location(s) of shop(s) that will be used for subcontracted work, and shall obtain written approval from the City's UDR/CTR before subcontracting the work.
- 1.23 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced, as needed.
- 1.24 Terminal boxes and auxiliary equipment enclosures shall be made to meet OEM's specifications.
- 1.25 The City's UDR and the Contractor's manager shall meet once a month to review the records of the completed work, works in progress, and any other matter related to this contract. Any discrepancies shall be resolved at that time, and all backlogs shall be completed by the 10th of the following month ("Exhibit B7").

- 1.26 Contractor shall install a stainless steel or aluminum identification tag stamped with the Contractor's name, job number, and repair date on each motor housing. The tag shall be secured with stainless drive pins. The cost of the identification tag shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repair work.
- 1.27 All motors with peeling paint or rust shall be sandblasted. The cost of sandblasting shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repair work.
- 1.28 Assembled motor units shall be tested for vibration. The vibration level shall not exceed 0.1" per second unfiltered. The vibration measurements shall be recorded on the "Exhibit B5, Shop Acceptance Test Form." All costs associated with the test shall be included as a part of the base cost of any Recondition/Repair or Rewind/Repair work.
- 1.29 The enclosed City of Houston forms included within this contract shall be used on each Recondition/Repair or Rewind/Repair work, and new motor purchases.
- 1.30 Steam-cleaned area(s) shall be so designed with all the run-offs captured into an approved oil/grease recovery system.
- 1.31 Delivery tickets and packing slips will contain quantity, part number, description of commodity delivered, name of Department or Section, and facility name to which the merchandise was delivered, the City's ordinance number, contract number, signature of receiving employee, printed name, employee number, and the authorization release number.
- 1.32 The repair shop must be able to verify all hours charged for machine work. This will apply to work done by the Contractor and its subcontractors. In-house work will be supported with copies of timecards, and this verification shall be submitted with the invoice.
- 1.33 The City reserves the right to review all payments made to the Contractor by auditing any and all documents associated with this contract, at a later date. Subject to such audit, any overpayments shall be recovered from the Contractor.
- 1.34 The Contractor shall be responsible for storing electric motors units and all its parts inside their shop. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at the Contractor's expense.
- 1.35 The price of parts supplied for this contract is the total cost of the item to the Contractor, supported by documentation.
- 1.36 The Contractor shall provide to the City a full set of completed test and data sheets, to include the "Electrical, Machinist and Mechanical Report" and "Winding Data Report," upon completion of work. The Contractor shall establish and maintain records for at least three (3) years that the product has passed inspection and/or test with defined acceptance criteria (EASA AR100-2010 1.3.2).
- 1.37 All inspection, cleaning, balancing, disassembly, reassembly, winding, dipping, baking, blasting, painting, testing, and documentation shall be included as part of the base rewind/reconditioning cost.

2.0 EXPLOSION-PROOF UNITS (MOTOR SUITABLE FOR NEC CLASS I, DIVISION I, GROUP D)

- 2.1 Repair of Underwriters Laboratory (UL) approved explosion-proof motor.
 - 2.1.1 The repair shall be performed in a UL-approved shop by skilled motor mechanics that are familiar with repair practices typical to explosion-proof motors.
 - 2.1.2 Only OEM parts shall be allowed in the repair of UL-approved units, except for bearings. (There shall be no other exceptions.) Approved by City's User Department Representative (UDR.CTR).
 - 2.1.3 Shafts, flanges, end bells, flame paths and/or other applicable parts as approved by the UDR shall be reworked for a repair of UL-approved units.
 - 2.1.4 Any casted component of the motor unit that is damaged shall be replaced.
 - 2.1.5 The repaired unit shall be recertified by an UL inspector.
 - 2.1.6 The shop shall provide the City with a copy of the re-certification document. The certificate shall bear the UL file number.
 - 2.1.7 All UL motors will be recertified by the Contractor and the City of Houston. A ULrecertification sheet shall be completed and become part of the invoice package.

3.0 ELECTRIC MOTOR INSPECTION, REPAIR, AND REPLACEMENT

- 3.1 The Contractor shall inspect, repair, and/or troubleshoot assemblies and subassemblies of the electric motors in lieu of replacement, unless the repair cost of the electric motors exceeds seventy (70) percent of the cost for replacing it with a new item. Generally the seventy (70) percent rule applies, but the City reserves the right to purchase or repair units based on motor economic evaluation and various operational considerations.
- 3.2 The CTR must approve the purchase of a new unit in lieu of repair.
- 3.3 Replacement motor shall be a "NEMA Premium Motor" type, unless otherwise authorized by the CTR in writing.
- 3.4 Contractor shall use the contract "Fee Schedule" under "Cost to Replace a Unit..." to invoice the replacement cost.
- 3.5 The price of the parts and material and cost of the replacement unit supplied by the Contractor shall be the original invoice cost to the Contractor, plus percent markup or percent discount per item. All original documentation shall be provided upon the submittal of the invoice to the City.
- 3.6 All motors that are deemed non-repairable shall be picked up by the City.
- 3.7 These non-repairable motors shall not be reassembled.
- 3.8 The City of Houston reserves the right to pick up any parts that are to be replaced.

3.8.1 Freight for Special Order Replacement or Repair Parts and/or Replacement or Repair Parts ordered and shipped from a state other than Texas or a Country other than the United States is the responsibility of the City. The Contractor must provide invoice(s) detailing freight cost with no Markup. Freight for all other replacement or repair parts is the responsibility of the Contractor.

3.9 Cleaning and Reconditioning-General

3.9.1 Repair shall consist of cleaning, analyzing, repairing and/or replacing parts, if needed, and final inspection and testing. Anti-friction bearings shall be replaced by per-motor manufacturer's specifications, or approved equivalent. Sleeve bearings shall be inspected and rehabbitted or replaced, per the City's UDR's instructions.

3.9.2 Motor Exterior Cleaning

3.9.2.1 Motor exteriors shall be cleaned by sandblasting or by steam cleaning. Motors that have peeling paint or rust scale shall be sandblasted. During sandblasting, nameplate and other identification plates shall be protected. The bearing housing shall have all openings tightly sealed against the entrance of sand.

3.9.3 <u>Metal Parts Cleaning</u>

3.9.3.1 All metal parts, including laminations shall be cleaned by sandblasting, steam cleaning, or solvent. If Oakite or similar treatment is used, it shall be removed immediately after cleaning is completed. Remove plastic fan before sandblasting. Protect all machined fits against damage by blasting. (It is preferable that the shaft not be blasted.) Contractor shall fully protect the end portions of the shaft, including the bearing journal, oil seal, labyrinth seal, and coupling fit areas.

3.9.4 Insulation Cleaning

- 3.9.4.1 Motor insulation shall be washed with hot soapy water 200 degrees Fahrenheit at 30 PSI, and then with fresh water. After cleaning, unit must be baked between 250 and 275 degrees Fahrenheit until an acceptable insulation level is obtained.
- 3.9.4.2 Repair shall consist of cleaning, analyzing, repairing and/or replacing parts, if needed, and final inspection and testing. Anti-friction bearings shall be replaced by per-motor manufacturer's specifications, or approved equivalent. Sleeve bearings shall be inspected and rehabbitted or replaced, per the City's UDR's instructions.

3.9.5 Complete Rebuilding

3.9.5.1 Repair shall consist of stripping, cleaning, rewinding, insulating, repairing and/or replacing damaged parts, final inspection and testing, and anti-friction bearings shall be replaced, per manufacture's specifications (or) approved

equivalent. Sleeve bearings shall be inspected and rehabbitted (or) replaced, per the City's UDR's instructions.

4.0 **SPECIFIC TASKS**

- 4.1 The City's UDR shall deliver (or pick up) electric motors units from the Contractor's facility. Contractor shall furnish the hoist, crane, etc., for loading and unloading of the unit.
- 4.2 Before disassembly, the Contractor shall inspect the unit and document the damaged and missing parts. A digital photograph of each motor as received shall be made part of the repair record.
- 4.3 The Contractor shall chemically and mechanically clean all external surfaces, as required.
- 4.4 The Contractor shall perform electrical tests, with measurements recorded, "as found" in the Electrical Report, to include:
 - 4.4.1 Insulation resistance to ground, in megohms, windings, and accessories; and
 - 4.4.2 Surge-comparison of winding.
- 4.5 The Contractor shall measure insulation resistance to the ground of windings and accessories with a 500 volts megohmmeter and a 1000 volts megohmmeter (EASA AR100-2010 4.2.2).
- 4.6 In the event that insulation resistance of the windings is below the recommended minimum value, the motor shall be disassembled, and the windings shall be cleaned and dried before surge-comparison testing.
- 4.7 The Contractor shall disassemble electric motors and clean all internal parts.
- 4.8 The Contractor shall inspect all components of the electric motors and all critical areas to determine if clearances are within OEM tolerances, and that the parts meet manufacturer's specifications. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in EASA AR100-2010, to assure its conformance.
- 4.9 The Contractor shall inspect the motors and its shaft for corrosion, erosion, chipping, and other damages, and shall record this observation on the Electrical Report and/or Mechanical and Machinist Report.
- 4.10 The Contractor shall inspect the rotor shaft for roundness/run-out and determine if it is within OEM tolerance. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in EASA AR100-2010, to assure its conformance.
- 4.11 The Contractor shall inspect the shaft extensions and keyseats (keyways). Shaft extensions must be smooth, polished, and concentric with shaft center. Shaft extension dimension shall be checked. Permissible diameter tolerances are given in EASA AR100-2010 (Tables 2-1 and 2-2). Permissible shaft run-out tolerances are stated in EASA AR100-2010 (Tables 2-3 and 2-4). Permissible shaft extension keyseat (keyway) width tolerances are stated in EASA AR100-2010 (Tables 2-5 and 2-6).

- 4.12 Contractor shall inspect each bolt for damaged threads.
- 4.13 Repairs shall include sandblasting, welding and machining, as required. Other services required by Contractor shall include Non-Destructive Testing (NOT), and chroming and metalizing, when required.
- 4.14 The core iron, if needed, may be grit-blasted with glass beads, walnut shells, corncobs, or similar materials. It shall not be blasted with silica, garnet, or other grits, which may cause shorts between laminations (EASA Tech Note 16).
- 4.15 Contractor shall determine which parts are to be machined or replaced with new parts. As a minimum, the Contractor shall replace all bearings and seals when the original unit was furnished with such items.
- 4.16 Within five (5) working days, for low voltage electric motors and ten (10) working days for medium voltage electric motors, the Contractor shall prepare and submit to the City's UDR a scope of the repair work to be carried out on the unit, which shall include a detailed good faith cost estimate. This cost estimate shall include: a) a brief description of the work to be performed; b) cost for new replacement OEM parts; c) estimated additional labor hours required for the repair of the unit not covered under the Base Cost; d) the estimated delivery time for parts; and e) expected completion date of the work.
- 4.17 The City's UDR shall inspect the tear-down unit, and a detailed disassembly and inspection (D & I) Report (Exhibit B-1) shall be issued prior the signing of the Contractor's proposed work scope and cost estimate.
- 4.18 Upon written acceptance of the cost estimate by the City's UDR, Contractor shall proceed with repairs. The Contractor shall commence to work on the unit and complete the repair within the allocated time for delivery of such item:

4.18.1 Motors 100 HP and smaller: 4 Weeks

4.18.2 Motors larger than 100 HP: 6 Weeks

4.18.3 Motors 1000 HP and smaller: 6 Weeks

4.18.4 Motors larger than 1000HP: 8 Weeks

- 4.19 The Contractor shall immediately notify the City's UDR, if the Contractor cannot complete the job within the contractually agreed time period listed in Article 4.18. The Contractor shall submit a detailed explanation to the City's UDR for the delay, and submit a new schedule for job completion.
- 4.20 At all times during the repair process, Contractor shall maintain City's equipment in a clean and weather-protected storage area.
- 4.21 The rotor assembly shall be checked for total "indicated run-out," and be recorded on the rotor information sheet. This test shall be carried out in V-Blocks.

- 4.22 Shaft seal surface, bearing journals, and coupling fit shall be micrometer-checked and recorded on the rotor information sheet.
- 4.23 End bells and bearing (housing critical dimensions) shall be micrometer-checked and recorded on the mechanical inspection sheet.
- 4.24 The above measurements shall be submitted to the City's UDR, along with the electrical and mechanical data sheets during the teardown inspection.
- 4.25 Replacement bearings shall have an L10 rating life in accordance with ANSI/AFBMA of at least 40,000 hours. If the L10 rating life of the existing bearing is larger than 40,000 hours, the Contractor shall replace the bearing with the same L10 rating life bearing, as the existing one.
- 4.26 The Contractor shall ensure the quality of varnish in the Dip Tank and the VPI system by sampling and testing the varnish every three (3) months. The Contractor shall have the varnish quality reports available for review by the City Inspection Team and the City's UDR.
- 4.27 After parts have been repaired, Contractor shall put together the rotating assembly and then balance it. The Contractor shall reassemble the electric motors, test, seal, and paint, as required.
- 4.28 Surface of all RECONDITION/REPAIR and REWIND/REPAIR units shall be prepared for painting (to white metal finish) by blast-cleaning them to SSPC-SP5.
- 4.29 Surface of all RECONDITION/REPAIR and REWIND/REPAIR units shall be primed and finished in an approved paint booth, using the motor manufacturer's standard epoxy painting system:
 - 4.29.1 The minimum prime coat thickness shall be 3 mils (OFT), and a dry film thickness (OFT).
 - 4.29.2 The minimum finish coat thickness shall be 6 mils (OFT), and a dry film thickness (OFT).
- 4.30 If manufacturer's information is not available, the following industrial coating specification for surface of motors and equipment shall be followed:
 - 4.30.1 The primer and finish coats shall be two-component, rust-inhibitive, polyamide-cured epoxy coating with a recoatable finish;
 - 4.30.2 The prime coat shall be Ameron 38P, Tnemec 69, or equal; and
 - 4.30.3 The finish coat shall be Ameron 38S, Tnemec 69, or equal.
- 4.31 Changes to paint specifications of Articles 4.28 to 4.30 shall be approved by the City's UDR.
- 4.32 The City's UDR/CTR shall specify the paint color.
- 4.33 All electrical work for RECONDITION/REPAIR and REWIND/REPAIR of the units shall be in accordance with Article 3.0 (ELECTRIC MOTOR INSPECTION, REPAIR, AND REPLACEMENT), unless otherwise specified in these specifications.
- 4.34 Contractor shall provide all equipment, tools, materials, parts and labor required to repair vertical and horizontal induction or synchronous motors, ranging from 100 to 2750 in horsepower size.

4.35 The enclosed rotor shaft run out/shaft diameter sheet shall be used in this contract.

5.0 <u>ELECTRIC MOTOR INSPECTION AND REPAIR</u>

- 5.1 Electric Motor Inspection and Repair-General:
 - 5.1.1 The Contractor shall provide a detailed "Disassembly and Inspection Report Sheet" showing the condition of the motor upon receipt, the repair work done, and the final test results.
 - 5.1.2 During disassembly, the electric motor shall be visually inspected to determine cause of failure, including electrical and/or mechanical failure.
 - 5.1.3 Stator winding phase-to-ground insulation shall be checked with a 500 volt megger and the results noted on the inspection form.
 - 5.1.4 Stator winding shall be checked for shorts using surge-comparison tests and all values to be recorded.
 - 5.1.5 The rotor assembly; shall be inspected for wear, scoring, cracks, and that the check for open rotor bars shall be performed with a growler and magnetic paper. The rotor assembly shall be inspected.
 - 5.1.6 All stators that are to be rewound shall be tested <u>after</u> "burnout and removal" of the winding with a core-loss tester, and a printout of the test shall be submitted to the City's UDR.
 - 5.1.7 Shaft seal surface, bearing journals, and coupling fit shall be checked with a micrometer, and shall be recorded on the rotor information sheet.
 - 5.1.8 The insulating material in the rewinding of the unit shall have a "Class F" rating, or better.
- 5.2 Electric Motor Inspection and Repair-RECONDITION/REPAIR.
 - 5.2.1 Motors which have been designated for winding reconditioning and have been thoroughly cleaned free from dirt, grit, grease, oil, and properly dried shall be inspected for winding damage, and repairs made to damaged areas.
 - 5.2.2 Motor insulation shall be washed with hot, soapy water of 200 degrees Fahrenheit at 30PSI, and then with fresh water. After cleaning, the unit must be baked between 250 and 275 degrees Fahrenheit until an acceptable insulation level is obtained.
 - 5.2.3 Reconditioned motors shall receive a minimum of two (2) dips, and shall be baked in insulating resin. Stator shall be baked at the insulation resin manufacture's recommended temperature, and with time to assure full curing.
 - 5.2.4 The Base Cost for <u>RECONDITION/REPAIR</u> shall include all cost of supervision, labor, tools, equipment, supplies and parts to complete the work, as specified herein for <u>RECONDITION/REPAIR</u>. This "Base Cost" does not include the cost of any bearings, seals, heaters, or broken parts (which are reimbursable), if authorized by the City's UDR.

- 5.3 Electric Motor Inspection and Repair-REWIND/REPAIR.
 - 5.3.1 The stator core shall be vertically set in the burnout oven. After burnout and winding removal, the core and frame shall be allowed to cool by a natural convection without forced air, as to avoid overstress or warping. Maximum burnout temperature shall be 650 degrees Fahrenheit to avoid damage to laminations.
 - 5.3.2 Torch heating shall <u>NOT</u> be used for stator cleanup.
 - 5.3.3 The stator core shall be blasted to a bare metal finish. Refer to Article 4.14 of these specifications for the type of grit permitted for blasting.
 - 5.3.4 The core shall be thoroughly cleaned, and the stator core shall be examined for lamination damage, such as fusing or metal loss due to arcs.
 - 5.3.5 Fused laminations shall be separated either by grinding or filing. Bent laminations shall be realigned, and all protrusions into the slot area shall be filed or ground smooth. Stator cores shall not be re-stacked without the City's UDR approval.
 - 5.3.6 Before a new winding is installed in a stator, the winding data shall be verified to assure that an OEM-equal winding is being installed. If the manufacturer's data is not available, the winding data shall be verified to assure it conforms to the relevant EASA data.
 - 5.3.7 Coils shall be formed with the same number of turns as the original winding. Resistance of the rewound stator shall be the same as the original winding.
 - 5.3.8 Coils shall be machine-wound with sufficient wire tension to obtain freedom from crossovers and uniform cross-section coils.
 - 5.3.9 Stator winding extensions shall be shaped to ensure adequate winding clearance on motor reassemble.
 - 5.3.10 Phase insulation shall be installed between phase coils prior to coil lacing, to minimize phase-to-phase contact. Separators shall be installed between the top and bottom coil in the core slots.
 - 5.3.11 Pre-formed slot wedges shall be used to secure the winding in the stator slot, with shim material as necessary to assure tightness.
 - 5.3.12 After the winding is completed, a check shall be made to ensure the slot insulation overhangs the core slot edges, and that it is not broken or torn at the core slot edges.
 - 5.3.13 All winding and lead connections shall be brazed with a "silver content" rod and insulated with "Class F" insulation, or better.
 - 5.3.14 The winding, connections and leads shall be securely laced to form an integral assembly with adequate physical clearance--to ground.
 - 5.3.15 All leads brought into the connection box shall be numbered and equipped with a compression lug, with a NEMA standard bolt-hole.

- 5.3.16 The finished stator winding insulation-to-ground shall be checked with a 500 volt megger (Low Voltage Electric Motors) and a 1000 volt megohmmeter (Medium Voltage Electric Motors). The minimum acceptable insulation resistance reading shall be 10 megohms.
- 5.3.17 The completed stator shall be preheated in a temperature-controlled oven to the varnish of manufacturer's recommendation, not to exceed "Class "F" operating temperature Fahrenheit, and shall be held at that temperature for one (1) hour.
- 5.3.18 Stator shall be allowed to cool by natural convection to the temperature required by insulation resin manufacturer, prior to being dipped in insulating varnish.
- 5.3.19 Stator shall be dipped three (3) times in insulating varnish, followed by repeating the processes of Articles 5.3.17 and 5.3.18.
- 5.3.20 Form-wound rewound stators shall go through VPI.
- 5.3.21 Baking shall be done in a temperature-controlled and force-ventilated oven to affect a complete and uniform cure, per manufacturer's instructions.
- 5.3.22 Resin shall be completely removed from the stator frame mechanical fit, outer paint surfaces, and the inner bore of the stator.
- 5.3.23 The contract base cost for <u>REWIND/REPAIR</u> shall include all cost of supervision, labor, tools, equipment, supplies and parts to complete the work as specified herein for <u>REWIND/REPAIR</u>. This base cost does not include the cost of any bearings, seals, heaters, or broken parts (which are reimbursable), if authorized by the City's UDR.

5.4 Disassembly

- 5.4.1 Before disassembly, nameplate data shall be verified, missing or damaged parts shall be identified in writing and recorded, and special items (conduit box, location, brakes, gears, etc.) shall be noted on the inspection form. Stator winding phase to ground insulation shall be checked with a 500 volt megger, and the results noted on the inspection form. Stator winding shall be checked for shorts, using a PJ surge comparison test, and all values shall be recorded.
- 5.4.2 During disassembly, the motor shall be visually inspected to determine cause of failure (including electrical and/or mechanical failure). Cooling coils shall be pressure tested, and
 - the oil standpipe shall be removed in a manner that does not compromise the integrity of, or cause damage to the standpipe--if the motor is so equipped. After the bearing housing has been checked with a micrometer and after necessary repairs have been made, the oil standpipe shall be reinstalled in a leak-free manner.
- 5.4.3 Upon completion of the motor disassembly and inspection, a repair form, an itemized cost quotation form and a time schedule for the final repair of each motor shall be completed and given to the City's UDR for approval. Upon request, the disassembled parts shall be made available for inspection by one of the designated City's UDR.
- 5.4.4 After completion of disassembly and inspection and the completion of the "Inspection and Repair Form," the Contractor shall be responsible for storage of motors and all parts.

Any parts lost or damaged in the Contractor's shop shall be repaired or replaced by the Contractor, at no cost to the City.

- 5.4.5 Dated repair quotes for Low Voltage Electric Motors are due within five (5) working days of the date a motor is delivered to the repair shop. Dated repair quotes for Medium Voltage Electric Motors are due within the (10) working days of the date a motor is delivered to the repair shop. Picture(s) of the motor shall be taken by the Contractor prior to disassembly, which will document the overall condition and any removable parts. Delivery of a motor to the repair shop shall be Contractor's authorization to disassemble, inspect, and prepare quotes. The repaired motor shall be ready for City's final witness test within a designated time frame of the quote approved by the City's UDR/CTR (See Section 14.8). In the event that a long lead time for repair parts are required, the City's UDR and/or CTR shall grant an appropriate time extension to the repair deadline. Request for
- 5.4.6 All Markups shall be based on Contractor's actual cost or sub-contractor's actual original invoiced documents. The Contractor shall submit these original invoices as attachments, with the final invoice for payment by the City for work performed by the Contractor.

6.0 STANDARD RESPONSE TIMES

- 6.1 Contractor shall be accessible to the City by telephone during normal business hours. The Contractor shall be ready to start work on any unit within twenty-four (24) hours upon receiving the call for service.
- 6.2 Contractor shall be available and accessible to the City by telephone to work overtime, if requested by the City's UDR.

time extensions shall be included in the repair quote.

- 6.3 Contractor shall be available and accessible to the City by telephone to work emergency, if requested by the City's UDR.
- 6.4 Contractor shall start an emergency job "within four (4) hours upon notification" without scheduling delays, and shall not be restricted to normal working hours. The City's UDR shall coordinate the emergency and overtime work. Upon the CTR's approval

7.0 REPAIR TECHNICIANS

- 7.1 The repair technicians of the Contractor shall be qualified, properly trained in Repair-Recondition and Repair-Rewind of electric motors, of the type and sizes specified under this contract.
- 7.2 The repair technicians of the Contractor shall have a minimum of three (3) years experience in
 - Repair/Recondition and Repair/Rewind of electric ·motors, of the sizes (voltage and horsepower) specified in the contract.
- 7.3 The Contractor shall furnish the resume of the technicians to the City's Inspection Team during the Team's site visitation of the Contractor's facility before contract award.

- 7.4 The Contractor shall provide the UDR and/or CTR with an updated resume for any additional motor technicians added to the team for the duration of the contract period.
- 7.5 These requirements shall apply to all of the subcontractors working for the Contractor.

8.0 SHOP ACCEPTANCE OF REPAIR

- 8.1 The City's UDR shall inspect the repaired unit before the run-test can begin. It is the Contractor's responsibility to ensure communication has been established with the City's UDR for witnessing the performance test.
- 8.2 Contractor shall perform insulation-resistance tests before conducting high-potential tests using a 500 volt megohmmeter.
- 8.3 Contractor shall perform high-potential tests of windings (new or reconditioned), as stated in EASA AR 100-2010 (Article 4.4, High-Potential Tests) of these specifications.
- 8.4 A "NO-LOAD" test run of the motor shall be performed at its highest rated voltage and frequency.
- 8.5 The electric motors unit shall be securely mounted to a leveled metal base plate, or be set on standard rubber isolation pads while vibration readings are taken.
- 8.6 Vibration measurements shall be taken on the completely-assembled unit at the DE and ODE, horizontal, and be vertical on the bearing-housing adjacent to the shaft.
- 8.7 Vibration measurements shall be expressed as velocity, unfiltered, and recorded on the Repair Data and Final Test Sheets. Acceptable maximum vibration level is 0.1" per second.
- 8.8 If deficiencies are detected, the repair work shall be rejected, and the Contractor shall make the necessary repairs, adjustments, or replacements.
- 8.9 After corrective actions are made, the unit shall go through a new test run before the electric motor is accepted.
- 8.10 A typed copy of shop's "Shop Acceptance Test Form" (Exhibit B5) covering the results of any specific test shall be included with the shipment of all repaired electric motors units. The City's UDR reserves the right to witness final shop testing and inspection of any and all repaired units. All units shall be run at their highest-rated voltage.
- 8.11 A typed copy of Repair Data Sheets covering results of specific tests such as rotor balance, vibration measurement, electrical testing results, mechanical measurements, and rewinding data shall be included with the shipment of all repaired electric motors units, if requested by the City's UDR.
- 8.12 The City shall not make payment to the Contractor until 'ALL" corrective actions are made, and when the equipment repair is accepted.

9.0 LABOR RATE

- 9.1 The labor rate shall include all costs for qualified person(s) to work on and repair the City Equipment including wages, all company benefits, and company profit. No separate labor costs shall be charged for these services.
- 9.2 All labor hours performed at Contractor's and/or sub-contractor's facility shall be supported with original time-cards and/or time-sheets along with final invoice.

9.3 Additional Services:

- 9.3.1 Prior to commencement of any "Additional Services," Contractor shall submit a written proposal for approval to the CTR's describing the work to be completed, including a "Not-to-Exceed" cost estimate. The proposal shall include at a minimum, a list of repairs, subcontractor(s), and a schedule of repairs, sub-contractors, schematics, design plans and a schedule of the repairs. Additional work shall not be performed without written approval from the CTR.
- 9.3.2 Contractor shall perform additional services using the unit rates and any applicable markup/discount within the Fee Schedule, as specified for the type of service provided. If the Fee Schedule does not cover the work needed, the Contractor shall submit detailed cost estimate including cost proposal and related supporting documentation (original price listing and quotes) from Contractor and Subcontractor showing description of parts or components to be repaired, replaced, part numbers, markup percentage, equipment rental costs, labor hours and rate, and other services including for review and approval by the CTR/UDR. CTR may request one or two competitive bids.
- 9.3.3 The fees charged for work performed by any subcontractor, including the Contractor markup shall not exceed the vendor's fee schedule within the upcoming contract.
- 9.3.4 The additional services referenced under Article 9.3 shall include but are not limited to services that might be required to facilitate the operation of these motors. Some examples would include onsite concrete repair work, motor pads, control panels and onsite field technicians.

10.0 INVOICES

- 10.1 Contractor shall submit invoices for payment no later than 30 days after the City of Houston has accepted and received the motor(s). The Contractor shall submit invoices with supporting documentation in triplicate (one original and two copies) that are on Contractor's company letterhead with the original signed by an authorized agent of the company. ALL SUPPORT DOCUMENTS SHALL BE ORIGINAL. The invoice number shall not be duplicated during the term of the contract period. Each invoice shall detail the following information:
 - 10.1.1 City contract number, City ordinance number and Contractor's job number.
 - 10.1.2 Contractor's job number and contract year shall appear clearly on all time sheets, (showing hours worked, break(s) and lunch time), invoices, and suppliers' invoices.

- 10.1.3 Contractor's name and address, and where the service was performed.
- 10.1.4 City equipment El number, and the City work order number.
- 10.1.5 City facility number and address where equipment had been prior to service.
- 10.1.6 Detailed description of services rendered.
- 10.1.7 Description of parts or of components repaired or replaced, including invoices for OEM parts purchased along with related O&M manuals, equipment rentals, time sheets (showing hours worked, break(s) and lunch time), and signed filed tickets.
- 10.1.8 Subcontractors invoices with detail description of work performed, hours, and parts cost must be current.
- 10.1.9 Detail labor hours and rates as stated in the "Fee Schedule" for in-house work.
- 10.1.10 City delivery and pickup tickets that shall include the following information:
 - City Facility Name
 - Work Order Number
 - Contractor's Job #
 - Equipment Release Number
 - City Employee Name/Number/ Signature with Date
- 10.1.11 UL recertification for explosion-proof units, (when applicable).
- 10.1.12 Sub-total costs for parts, labor, Additional Services (Fees and Costs), PM and Replacement Costs shall be included on final cost approval sheet and included with supporting documentation.
- 10.1.13 All supporting documentation including but not limited to: Shop Acceptance Form, Teardown and Recommended Repair Form, UL Certification Form (when applicable), Equipment Release Authorization Form, Recommended Repair Estimate Form, Fits and Indicated Run-out Form (when applicable), and the Final Acceptance Tests Form & Balancing Form
- 10.1.14 Total invoice job costs.
- 10.1.15 A clear indication of repair costs of the unit in a percentage, compared to the cost of a new unit.
- 10.1.16 The charts for bake and burn, and all documentation of the records of every preheating and dipping of insulation varnish shall be submitted.
- 10.1.17 The Contractor's Invoice Checklist Report Form (Exhibit B8) shall be included with each invoice.
- 10.1.18 The Contractor's Invoice Checklist Report Form (Exhibit B8) shall be included with each invoice along with required documentation.

- 10.1.19 All unit prices for labor and parts shall be easily identified utilizing the line item number and the quoted contract pricing within the Fee Schedule
- 10.1.20 All unit prices for labor and parts shall be easily identified utilizing the line item number and the quoted contract pricing within the Fee Schedule.

Accounts Payables
PWE -APSC
PWEAPSC@HOUSTONTX.GOV

Attn.: Accounts Payables - Service Contracts

P.O. Box 61449

Houston, TX 77208 -1489

10.2 Invoice Attachment

- 10.2.1 All invoices must be submitted in triplicate, itemized as to quantity, part number description, and applicable discount, if any. In addition, invoices must show the name of the Department, Division or Section, facility name (to which the merchandise was delivered), the City of Houston ordinance number, contract number, the receiving employee identification number and date, and the pick-up date of the motor. The City Department shall be supplied with duplicate copies of all invoices for material, labor, machine work that has been added to the base cost, and copies of daily timecards. Timecards must reflect time equipment that is stamped in and out. Timecards not stamped may result in a delay in invoice payments.
- 10.3 At the end of each month, the City's UDR and a repair shop representative shall compare records for a balance. Any discrepancies shall be resolved at that time. This balance shall be completed by the 1oth of each month.
- 10.4 Delivery tickets and packing slips shall contain quantities, part numbers, description of commodity delivered, name of Department or section, and facility name to which the merchandise was delivered, the City's ordnance number, contract number, signature of receiving employee, printed name, employee number, and the authorization release number. Mail invoices to the Public Works and Engineering Department, P.O. Box 61449, Houston, Texas 77208.
- 10.5 All unit prices for labor and parts shall be easily identified against the quoted contract pricing. Mail invoices to Accounts Payable.
 - 10.5.1 Addresses will be given at the post-award meeting: Appropriate Department, P.O. Box, Houston, Texas

11.0 ADDITIONS AND DELETIONS

11.1 The City, by written notice from the Chief Procurement Officer to the Contractor, at any time during the term of this contract, may add or delete like or similar equipment, supplies, locations and/or services to the list of equipment, supplies, locations, and/or services to be provided. Any such written notice shall take effect on the date stated in the notice from the City. Similar equipment, supplies, services, or locations added to the contract shall be in accordance with the contract

specification/scope of services, and the charges or rates for items added shall be the same as specified in the Fee Schedule. In the event, the additional equipment, supplies, locations and/or

services are not identical to the item(s) already under contract, the charges therefore will then be the Contractor's normal and customary charges or rates for the equipment, supplies, locations and/or services classified within the Fee Schedule.

12.0 ESTIMATED QUANTITIES NOT GUARANTEED

12.1 The estimated quantities specified herein shall not guarantee actual quantities, as the City shall not guarantee any particular quantity of motor repair services during the term of this contract. The quantities shall vary depending upon the actual needs of the user Department. The quantities specified herein are good faith estimates of usage during the term of this contract. Therefore, the City shall not be liable for any contractual agreements/obligations the Contractor enters into based on the City purchasing/requiring all the quantities specified herein.

13.0 WARRANTY OF SERVICES

- 13.1 Contractor shall observe the highest standards of diligence and care in the performance of repair services, and shall meticulously follow the standards and procedures required by the equipment manufacturer.
- 13.2 The Contractor further warrants that all service and replacement parts it provides shall be in strict compliance with all applicable regulations.
- 13.3 The Contractor shall fully warrant its installation, replacement, repair and maintenance of all parts and equipment from the date of acceptance by the City of Houston for a twelve (12) month period or Manufacturer's warranty offer, whichever is greater. Refer to Exhibit "B-11" Certificate of Warranty.
 - 13.3.1 The specific repair work performed and the replacement parts furnished shall be warranted for a period of one (1) year Manufacturer's warranty offer, whichever is greater from date of completed work. The guarantee (warranty) period shall begin the date the City's UDR officially accepts the repaired motor.
- During the warranty period, ALL related work shall be started by Contractor within twenty-four (24) hours after notification, and shall be completed within ten (10) days.
- During the warranty period, ALL failed units shall be re-repaired or replaced at Contractor's expense, if failure occurs under normal operating conditions or if the failure shall be due to faulty parts or negligence of the Contractor. The initial warranty shall not be extended beyond the twelve (12) month period, as a result of any warranty work.
- 13.6 Definitions: "Acceptance" as used in this clause, means the act of an authorized representative of the City by which the City assumes for itself, approval of specific services as partial or complete performance of the contract.
- 13.7 "Correction" as used in this clause, means the elimination of a defect.
- 13.8 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract shall, at the time of acceptance, be free from defects in workmanship and conform to the

requirements of this contract. The City shall give written notice of any defect or nonconformance to the Contractor within a one (1) year period from the date of acceptance by the City. This notice

shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming services at no additional cost to the City, or (2) that the City does not require correction or reperformance.

- 13.9 If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City shall, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the City thereby, or make an equitable adjustment in the contract price.
- 13.10 If the City shall not require correction or re-performance, the City shall make an equitable adjustment in the contract price.
- 13.11 Any expenses incurred during warranty work as related to the motor shall be the burden of the Contractor and/or the motor manufacturer.
- 13.12 If the unit undergoing warranty work is out of service for more than fifteen (15) additional days, then the warranty period will be extended to the exact amount of days the motor was out of service for warranty.
- 13.13 The Contractor further warrants that all service and replacement parts it provides shall be in strict compliance with all applicable regulations.

14.0 SITE VISIT

14.1 When deemed necessary, an inspection shall be made by the Public Works and Engineering Department to determine whether a Contractor has a facility at the location listed in the Contractor's bid document.

15.0 POST-AWARD MEETING

15.1 Once the contract has been approved by City Council, the Public Works and Engineering Department shall schedule a post-award meeting with the Contractor and the City's CTRs. This meeting shall include procurement, City contact lists, Contractor pricing, payment procedures, and all other matters related to contract administration.

16.0 CONTRACT COMPLIANCE

- 16.1 The Public Works and Engineering Department reserves the right to monitor this contract for compliance to ensure legal obligations are fulfilled, and that acceptable level of services are provided.
- 16.2 Monitoring may take the form of, but not necessarily limited to:
 - 16.2.1 Site visits;
 - 16.2.2 Review of deliveries received for accuracy and timeliness; and
 - 16.2.3 Review of Contractor's invoices for accuracy.

16.3 The responsibility for monitoring compliance rests with the Contract Compliance Section of Management Support Branch of the Office of the Director, Public Works and Engineering Department.

17.0 LOCAL PRESENCE/SOURCE

17.1 With respect to the low and medium voltage electric motor repair services, Contractor shall have a local authorized facility located within the Houston Metropolitan Area.

18.0 LOCAL WAREHOUSE AND SHOP FACILITY REQUIREMENTS

- 18.1 The Contractor(s) must satisfy the City's UDR by having a local authorized facility located within the Houston Metropolitan Area. This shall apply to any subcontractors used under this contract.
- 18.2 Contractor(s) shall have adequate staff with qualified personnel. (Resumes may be required.)
- 18.3 Contractor(s) store or branch building shall be in condition of good repair, maintain safe walkways and off-street parking. Facilities shall meet the National Electrical Code (NEC) and National Fire Protection Association (NFPA). Facilities shall be subject to occupancy inspection.
- 18.4 Contractor(s) shall have a paint booth, which meets the code of Federal Regulations (CFR) "Section 1907.107." Parts cleaning tanks and areas including dip tanks shall meet the Code of Federal Regulations (CFR) Section 1907.168.
- 18.5 Contractor(s) repair facility shall provide adequate accessibility for City of Houston delivery vehicles to safely enter and exit without exposing the operator or vehicle to unnecessary dangers, such as crossing medians or backing in to traffic lanes.
- 18.6 Motors equipped with lifting eyes or similar factory lifting points shall be handled throughout the repair process with an overhead crane, for loading and unloading. The Contractor shall maintain adequate indoor, clean, and dry storage space for storing motors or motor components under repair.
- 18.7 Facilities shall provide a climate-controlled winding room, isolated from the teardown, sandblasting, and similar contaminants that could possibly shorten the life expectancy of a winding.
- 18.8 Testing equipment shall be safe and built to test motors at their highest rated voltage, in accordance with the National Electrical Code, City of Houston Electrical Code, and other applicable codes and ordinances.
 - 18.8.1 All test equipment required for test results shall be calibrated at least annually against standards traceable to the National Institute of Standards and Technology (NIST), or equivalent standards laboratories (EASA AR100-2010 4.7). The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product--to specified requirements.
- 18.9 Contractor(s) shall have a written safe work practice procedure in effect, which is acceptable to the City.

18.10 Steam clean area shall be so designed that all run-off can be captured and an approved oil/grease recovery system shall be in place.

19.0 SPECIAL NOTE

19.1 The City reserves the right to review all payments made to Contractors by auditing at a later date. Subject to such audit, any overpayments may be recovered from the Contractor.

20.0 REMOVAL OF EQUIPMENT

20.1 Any and all equipment removed from City property shall be accompanied by a City of Houston's "Equipment Release Authorization Form" (ERAF) – (Exhibit B3). The Public Works and Engineering Department may use a motor log in conjunction with the ERAF. The City's ERAF shall be provided by the Department requesting services. The form shall be adjusted by the City's UDR to reflect the contract and ordinance numbers pertaining to this contract.

21.0 EQUIPMENT TRACKING

- 21.1 Contractor shall ensure that El tags remain attached to the equipment. Contractor shall notify the City's UDR if the El tag is damaged or missing.
- 21.2 All illegible or defective nameplates shall be replaced on completion of repair. All original nameplate information, except where changed, shall be stamped on new nameplates. New nameplates shall be permanently attached with mechanical fasteners. The cost of a new nameplate shall be included as a part of the base cost of any recondition/repairs, or rewind/repairs.
- 21.3 The City's UDR/CTR shall ensure that Maintenance Management System (MMS) procedures for tracking the Division's equipment are strictly followed.
- 21.4 The City's UDR/CTR shall ensure that contracted repair expenses (labor, material, equipment and warranty) are to be inserted into the MMS and shall update the MMS history.

22.0 MECHANICAL INSPECTION

- 22.1 The rotor assembly shall be inspected for wear, scoring, cracks, and the check for open rotor bars shall be done with a core-loss tester.
- 22.2 The rotor assembly shall be checked for total indicated run-out and recorded on the rotor information sheet.
- 22.3 Shaft seal surface, bearing journals and coupling fit shall be micrometer-checked and recorded on the rotor information sheet.
- 22.4 End bells and bearing (housing critical dimensions) shall be micrometer-checked and recorded on the mechanical inspection sheet.
- 22.5 The above recorded measurements shall be submitted to the City's UDR/CTR, along with the electrical and mechanical data sheets before the tear-down inspection.

EXHIBIT "B" SPECIFICATIONS / SCOPE OF SERVICES

SOLICITATION NO.: S74-L26288

23.0 FAILURES

23.1 Any failure covered by warranty shall be repaired or replaced by the successful Contractor(s) at the Contractor's expense.

24.0 ELECTRIC MOTOR INSPECTION

24.1 The City's UDR/CTR reserves the right to inspect any warranty failure repair after notification to the Contractor. The above recorded measurements shall be submitted to the City's UDR/CTR, along with the electrical and mechanical data sheets before the tear-down inspection.

25.0 SHOP INSPECTION AND TESTS

25.1 The City's UDR/CTR reserves the right to inspect any work in progress, and/or witness any and all tests specified within these specifications. When witness tests are specified, the Contractor shall be responsible for notifying the City's UDR/CTR a minimum of twenty-four (24) hours in advance of the scheduled date and time of the tests.

26.0 MOTOR REPAIR DATA SHEET

26.1 A motor repair data sheet shall be provided by the Contractor showing the condition of motors upon receipt, repair work completed, and final test results.

27.0 MATERIALS

27.1 All materials used to replace damaged and missing parts shall be new and equal in quality as the OEM. Any substitutions shall be approved by the City's UDR/CTR.

28.0 WORK BY OTHERS

28.1 The Contractor shall advise the user Department of the name(s) and location(s) of shop(s) that shall be used for specific repair work, and obtain approval from the City's UDR/CTR before subcontracting the work.

29.0 ACCESSORIES

- 29.1 Space heaters shall be installed on motors which are not so equipped when requested by the City's UDR/CTR. Heaters shall be arranged to provide optimum uniform heating of stator winding. Heater wattage and voltage shall be decided by the City's UDR/CTR. Defective space heaters shall be replaced.
- 29.2 Unless otherwise specified. space heaters shall be replaced "like-for-like," and as positioned and wired in the original winding.
- 29.3 All illegible or defective nameplates shall be replaced on completion of repair. All original nameplate information, except where changed shall be stamped on new nameplate. This shall be part of the Recondition/Rewind price. New nameplates shall be permanently attached with mechanical fasteners.

30.0 RECONDITIONING WINDING

30.1 Insulation and Winding Support Repair

30.1.1 Motors which have been designated for winding reconditioning and have been thoroughly cleaned free from dirt, grit, grease, oil, and properly dried shall be inspected for winding damage and repairs made to damaged areas.

30.2 <u>Sealing Treatment</u>

30.2.1 Reconditioned motors shall receive a minimum of two (2) dips and baked in insulating resin. Stator shall be baked at manufacturer's recommended temperature and time to assure full curing.

31.0 STATOR REWIND (RANDOM AND FORM WOUND)

31.1 Winding Removal

31.1.1 The stator core shall be vertically set in the "burn-out" oven. After "burn-out" and winding removal, the core and frame shall be allowed to cool by natural convection without forced air, to avoid over stress or warping. Maximum "burn-out" temperatures shall

be 650 degrees Fahrenheit as to avoid damage to laminations. Torch heating shall <u>NOT</u> be used for stator cleanup.

31.2 Stator Core Preparation

31.2.1 The stator core shall be sandblasted to a bare metal finish. The core shall be thoroughly cleaned, and the stator core shall be examined for laminations damagedue to arcs such as fusing or metal loss. Fused laminations shall be separated either by grinding or filing. Bent laminations shall be realigned, and all protrusions into the slot area shall be filed or ground smooth. Stator cores shall not be re-stacked without the City's UDR's approval. Core-loss testing shall be performed to identify those that are inefficient. All stators that are rewound shall be core-loss tested with a modern core-loss tester, and the City's UDR shall receive a printout of test results.

31.3 Rewind Materials

31.3.1 All insulating material used in the rewind shall have a "Class F" rating.

32.0 MECHANICAL WORK

32.1 Metal Parts

32.1.1 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced, as approved by the City's UDR.

32.2 Equipment Enclosure

32.2.1 Terminal boxes and auxiliary equipment enclosures shall be made to meet manufacturer's specifications.

32.3 Replacement Hardware

32.3.1 All motors equipped with cooling coils shall be hydrostatically tested. All fittings, connections, tubes and/or coils shall be inspected for leaks and other damages. Defective items shall be repaired and/or replaced, per motor manufacturer's specifications, and as approved by the City's UDR.

32.4 Shaft

32.4.1 Shafts shall be checked for damaged threads, fretted or galled areas, and rubs. Check shaft straightness between centers and against the manufacturer's drawings, if possible. Keyways shall be checked for stress cracks; this check shall be made in a lathe, as the use of "V Blocks" shall not be accepted.

32.5 Air Intake and Exhaust Systems

32.5.1 Screens and filters shall be replaced, where found defective. Screens shall be stainless steel, if required, and filters shall be of the permanent type.

32.6 Rotor Balance

32.6.1 All motor rotors shall be two (2) plane dynamically-balanced with complete rotating assembly. Where keyway is provided, the rotor shall be balanced with a half-key, and without any other item on the shaft. Then, if there is a pulley, coupling half, impeller, external fan, or any other item, these items shall be installed one at a time, and balanced. Balance weights, when required, shall be added to a permanent and stable portion of the rotor-to balance rotor only. If balancing weights are added to the rotor, they shall be permanently secured by an approved method. Grinding on the rotor is not acceptable.

32.7 Ratchet Assembly

32.7.1 Ratchet assemblies shall be checked for structural integrity or defects, and shall be repaired or replaced, as approved by the City's UDR, and the trim balanced on final assembly.

32.8 Reassembly

- 32.8.1 The repaired motor components shall be reassembled and shall replace any suspect hardware. The assembled motor shall be checked for free rotation and proper fit of all components.
- 32.8.2 All machined surfaces and bolt threads shall be coated with a rust-resistant lubricant.
- 32.8.3 Only properly marked leads necessary for connection of the motor supply shall be brought out to the junction box. The lead entrance to the junction box on all "T.E.F.C." motors shall be sealed. Leads and connectors shall be sized at 125% of full-load amperage, at a minimum.

32.8.4 After assembly, the motor exterior shall be cleaned while removing all grease, loose paint and other foreign material. The motor shall be spray painted in the paint booth with "epoxy and/or equivalent paint. The paint color shall be designated by the proper color designation, according to specifications.

32.9 Bearing Temperature

32.9.1 The repaired motor shall run at its highest-rated voltage at no load until bearing temperatures cease to rise as measured at the hot spot, 180-degree Fahrenheit

maximum in each bearing housing. The temperature shall be recorded on the final test sheet as well.

32.10 Vibration Measurement

- 32.10.1 The motor shall be securely mounted to a leveled metal "base plate," or set on standard rubber isolation pads while vibration readings are recorded.
- 32.10.2 After the bearing temperature run, vibration measurements shall be taken on the
- 32.10.3 completely-assembled motor at the DE and ODE, and to the horizontal and vertical on the bearing-housing adjacent to the shaft.
- 32.10.4 Vibration measurement shall be expressed as velocity, unfiltered, and recorded on the motor repair data sheet. Acceptable maximum is 0.1" per second.

33.0 REPAIR RECORD

- 33.1 Shop data sheets covering results of specific tests such as rotor balance, vibration measurement, electrical testing results, mechanical measurements and rewinding data shall be returned when the motor is shipped or returned, if requested.
- 33.2 All shop records of each motor shall be stored and/or maintained up until two (2) years after delivery per motor.

34.0 FINAL TESTING AND INSPECTION

34.1 A typed copy of shop testing and inspection data covering the results of any specific test, shall be included with the shipment of all repaired motors. The City's UDR reserves the right to witness final shop testing and inspection of any and all repaired motors. All motors shall be run at their highest-rated voltage.

35.0 MOTOR ECONOMIC EVALUATION

35.1 Service Contractor, upon request of the user Department must provide to the City's UDR the nominal efficiency of the motor proposed to be reconditioned or rewound, per manufacture data, and the nominal premium efficiency of a new replacement motor. The Contractor shall also provide a cost estimate for the repair, and the cost of a new motor with premium nominal efficiency. After the

EXHIBIT "B" SPECIFICATIONS / SCOPE OF SERVICES SOLICITATION NO.: S74-L26288

economic evaluation by the City's UDR, the City shall inform the service Contractor on how to proceed.

36.0 SILENCE OF SPECIFICATIONS

36.1 The apparent silence of these specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice shall prevail, and that only material and workmanship of the finest quality shall be used. All interpretations of these specifications shall be made on the basis of this statement. The Contractor shall be an established supplier of the contract items.

37.0 INTERLOCAL AGREEMENT:

37.1 Under the same terms and conditions hereunder, the Contract may be expanded to other government entities through inter-local agreements between the City of Houston and the respective government entity that encompass all or part of the products/services provided under this contract. Separate contracts will be drawn to reflect the needs of each participating entity.

38.0 <u>CRIMINAL JUSTICE INFORMATION SYSTEMS (CJIS) COMPLIANCE (Applicable to Houston</u> Police Department (HPD) Occupied Facilities:

38.1 The Houston Police Department recognizes that by allowing physical or logical (electronic) access to HPD facilities or network resources, people may gain access to information or systems they are statutorily prohibited

from accessing. To comply with state and federal regulations, the Houston Police Department is required to document and investigate access requests to be sure access is necessary and permitted. Bidders/Respondents, therefore, agree to review the Criminal Justice Information Systems (CJIS) process and related documents located at http://www.houstontx.gov/police/cjis/hpdvendorcertification.htm and shall comply with the terms and requirements therein.

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EXHIBIT "B-1" TEARDOWN AND RECOMMENDED REPAIR REPORT SOLICITATION NO.: S74-L26288

Teardown and Recommended Repair Report
City of Houston
Public Works & Engineering Department

Sample Only, Actual Form is subject to change by CTR after award of the Contract

Contractor:		X shirth Charles			Contra	ctor Job Number	4 K \$
City Contract #:			_City Relea	se #:	· • • • • • • • • • • • • • • • • • • •	City Ordinan	ce #:
Pump Location:		the section of the se	Cit	y Facility N	umber:		EI #:
Nameplate Infor	mai	tion:					
Make:			Volta		HP:		RPM:
Model:		/ 1990/00/00/00/00/00/00/00/00/00/00/00/00/	Amp:		Hz:	C.A	SF:
Serial:			Impeller C	ode:	1		
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Prepared By:				Job Title:			Date:

EXHIBIT "B-2" U. L. CERTIFICATION FORM

SOLICITATION NO.: S74-L26288

U. L. CERTIFICATION FORM

City of Houston Public Works & Engineering Department

Sample Only, Actual Form is subject to enange by CTR after award of the Contract

NAME OF REPAIR SHOP:		
FACILITY NAME	JOB #	EI#
OLD U.L. SERIAL #	NEV	W SERIAL #
ORIGINAL CLASS	ORIGI	NAL GROUP
REBUILT CLASS	REBUIL	T GROUP
DATE NEW SERIAL # ISSUED		
WORK DONE		
SUBMERSIBLE PUMP MFGR	FRA	ME
SUBMERSIBLE PUMP SERIAL #	10.1100 1.10018.01.1.	
HPVOLTS	AMPS	CODE
INSULATING CLASS	THERMOST	AT MOUNTING CODE
U.L. INSPECTOR NAME:		
III INCDECTOD EMBI OVEE #		

EXHIBIT "B-3" EQUIPMENT RELEASE AUTHORIZATION FORM

SOLICITATION NO.: S74-L26288

EQUIPMENT RELEASE AUTHORIZATION FORM

City of Houston
Public Works & Engineering Department
Motors Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after award of Contract)

RELEASE#:			
DATE:	CITYWORKOR	DER#:	
CITY FACILITY NAME:	CITY FACI	LITY#:	EI#:
CONTRACTOR:		CONTRACTO	OR JOB #:
CONTRACTOR ADDRESS:			
CONTRACT #:			ORDIANANCE #:
NAMEPLATE INFORMATION	J:		
MAKE:	VOLT:	HP:	RPM:
MODEL:	AMP:	Hz:	SF:
SERIAL:	IMPELLER CODE:		
NAME OF THE SHOP THE E			NO:
CONTRACTOR REPRESENT			HOUSTON REPRESENTATIVE
NAME:		_ NAME:	
EMPLOYEE #:		_ EMPLOYE	E #:
SIGNATURE:		SIGNATUR	RE:
DATE:			
COMMENTS:			

EXHIBIT "B-4"

City Work Order #:

City Facility #:

Contract Year:

City Release #:

City Contract #:

Contractor's Name:

City Facility Name:

RECOMMENDED REPAIR ESTIMATE FORM MOTOR REPAIR SERVICE CONTRACT

SOLICITATION NO.: S74-L26288

City of Houston, Public Works & Engineering Department Waste Water Operations

Contractor's Job #:

City Ordinance #:

City El #:

Nameplate Information:				*
Make:	Volt:	HP:	· · · · · · · · · · · · · · · · · · ·	RPM:
Model:	Amp:	Hz:		SF;
Serial:	ID#			FRAME:
Motor#:	TYPE:			ENCL:
UNIT PRICE ITE	MS	Unit Price		Extended Price
Disconnect Unit, Etc., Remove Unit fr		1		CACOTAGG FILED
Transport to Unit to Contractor's Fac				/////////////////////////////////////
Transport/Return Unit to City Facility	· · · · · · · · · · · · · · · · · · ·			
Install Unit, Etc., and Perform Test Ru	'n			
Recondition-Repair				
Rewind-Repair				
Sub-Total of Unit Price items		<u></u>		
			Mark	
COST PLUS ITEM	WS	Cost	Up	Extended Price
SEE DETAILED PARTS LIST			XX%	
Sub-Total Cost Plus items				
Sub-Total of Additional Labor Costs	(attach detail)			
Sub-Total of Additional Services (at	tach detail)			
ion – Repairable Cost				
OTAL Estimated Cost of Motor Re	pair			
REPLACEMENT Cost of Unit, TEFC	& NEMA PREM.EFF.			
OTAL Replacement Cost of New Mk	otor			
lepair Approved by UDR: Signature		Date:		
C. C		Print UDR's	Name	
O NOT Repair by UDR: Signature/D)ate			
		Date:		
eplacement Approved by CTR: Sign	nature	Print CTR's	Name:	

EXHIBIT "B-5" SHOP ACCEPTANCE TEST FORM SOLICITATION NO.: \$74-L26288

SHOP ACCEPTANCE TESTS FORM

City of Houston

Public Works & Engineering Department Motor Repair Service Contract

(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

Contractor:		Contracto	r Job #:	
Contract #:	Ordinance #:	City Wo	rk Order #:	
City Facility Name:	City Facility #:		EI #:	
Nameplate Information:				
Make:	Volt:	HP:	RPM:	
Model:	Amp:	Hz:	SF:	
Serial:	Impeller Code:			
Stator Megger Test:				Marin
Cable Megger Test: Hi-Potential Test:				
Source Voltages	V ₁ =	V ₂ =	V ₃ =	
No-Load Currents	I ₁ =	l ₂ =	I ₃ =	
Vibration	Axial =	Radial =	Vertical =	
Comments and Deficiencie	98:			
	***************************************	and the second s		
Tests Performed By:	Job Title:		Date:	
Witnessed By UDR:			Date:	

EXHIBIT "B-6" TIMESHEET REPORT FORM SOLICITATION NO.; S74-L26288

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

SERVICE DEPARTMENT
City of Houston Time Sheet

	City of Ho	uston Time Sheet					· · · · · · · · · · · · · · · · · · ·	
CUSTOMER	City of Houston	CUSTOMER ORDER#						
JOB LOCATION		RELEASE#						
UDR		MODEL - SERIAL #						
WEEK BEGGINNING	DESCRIP'	TION OF WORK		RS W				
1/5/2010		EMPLOYEE NO.	1	2	3	4	5	6
SUNDAY 5-J	an							
MONDAY 6-J	an				-			
TUESDAY 7-J								
TUESDAY 7-J	dii							
WEDNESDAY 8-J	an							
THURSDAY 9-Ja	an							
FRIDAY 10-J	an							***************************************
JOB COMPLETE?	Y E N O							
SIGNATURE FOR FIEL SERVICE	_D			SHO	P PEF	RSON	NEL.	#
OR SHOP MANAGER	₹ /							1
							,	2
CUSTOMERS COMMENTS	S:		·					3
								4
		·:		FIEL	D PEA	SON	VEL_	
		4-1						5
		history to the state of the sta						6
		***************************************		·				

EXHIBIT "B-7" PROGRESS AND STATUS REPORT FORM SOLICITATION NO. S74-L26288

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

,	Work	Work		Fac.							Date	Shop			Person		Cost	Expend.
Release	Order	Order	E.I.	¥	Fac.	Manufac	Model	Serial	H.P.	Problem	in	Job	Inspect	Test	Called	Allocate d	OI	То
Number	#	Date	H		Name		#	Ħ			Shop	Ħ	Date	Date	Date	Amount	Repair	Date
																\$	\$	\$

EXHIBIT "B-8" INVOICE CHECKLIST REPORT FORM

SOLICITATION NO.: S74-L26288

City of Houston
Public Works & Engineering Department
Motor Repair Service Contract

(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

ATTACHMENT "I"

	INVOICE CHECKLIST		
	"Company Name" / (Motor) / Contract # 460000XXXX		
a) Facility Name:		Fac	ility #
b) Date:		· · · · · · · · · · · · · · · · · · ·	
Review Date:			
Commen	ts:		
Johnson	<u>191</u>		
Instruction	ons 1) Check mark "X" selected items listed below. 2) Sign and date at the bottom of form		
ltem Number	Contract Requirements Description	Contractor Review	UDR Review
1	City Contract Number, and Ordinance Number		
2	Contractor Job Number		
3	Contractor's name and address		· · · · · · · · · · · · · · · · · · ·
4	Contractor's representative name, signature and date		
5	City facility name, number and address where service was provided		
6	Detailed description of services rendered		
7	Equipment Identification Number		
8	City Equipment Release Number		
9	City Work Order Number		
10	Subcontractor's invoices with description of work performed, hours and parts cost		
11	Detailed labor hours and rates as stated in the "Fee Schedule" (when applicable)		
12	City delivery and pickup tickets		***
13	UL Re-certification for explosion-proof units (when applicable)		
14	Subtotal cost for parts and labor separately		
15	Shop Test/Acceptance Form, Teardown and Recommended Repair form, Equipment Release authorization form, Recommended Repair Estimate Form & Final Repair Cost Form All unit prices for labor and Parts are easily identified against the guoted		A1
16	contract pricing	-	
17	Invoice charged to correct job #		·····
		Total Amount (\$)	

Date

Contractor Signature

EXHIBIT "B-9"

FITS AND INDICATED RUNOUT (HORIZONTAL MOTOR)

SOLICITATION NO.: S74-L26288

City of Houston
Public Works & Engineering Department
Electric Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of Contract)

(Horizontal Motor)

Horizona	al Ball
Bearing	

Job #

0

Fits and Indicated Runout

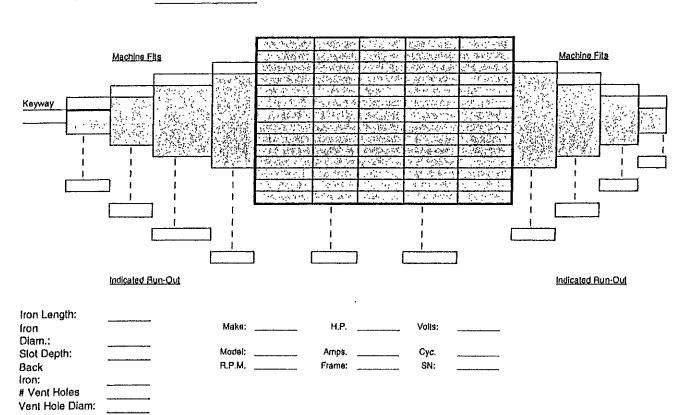


EXHIBIT "B-10" FITS AND INDICATED RUNOUT (VERTICAL MOTOR)

SOLICITATION NO.: S74-L26288

City of Houston

Public Works & Engineering Department
Electric Motor Repair Service Contract
(Sample Only. Actual Form is subject to change by CTR after Award of the Contract)

(Vertical Motor)

vertical Hotor	Fits an	a indicate	a Hunout
Dun Cuter		E.M.I. Job #	<u>o</u>
Run Outs:		Machine File:	Name Plate Information Make: 0 H.P. 0 Voits: 0
			Model: 0 R.P.M. 0 Frame: 0 Cyc. 0
			Amps: 0 SN: 0
	特別 14 15 16 16 17 17 17 17 17 17		
 전환 경화 및 목가의 경조를 본경 및 함께 및 함 	(2015年 日本 1975年 日本	lro Sic	n Length: n Dlam.: et Depth: ck Iron:
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EXHIBIT "B-11" CERTIFICATE OF WARRANTY FORM

SOLICITATION NO.: S74-L26288

Warranty of Installation, Replacement Repair and Maintenance
Department of Public Works and Engineering
Electric Motor Repairs Services for Medium Voltage Motors
Sample Only, Actual Form is subject to change by CTR after Award of the Contract

CITY	OF HO	DUSTON	
STAN	DARD	DOCUMEN	Τ

CERTIFICATE OF WARRANTY

В	Ι	D	N	О	:

OUTLINE AGREEMENT NO: [No.]

TO: [Contractor 's Company Name]

Contractor and [Contractor 's Address]

Address for Written Notice

1.1 DATE OF SUBSTANTIAL COMPLETION

The Work performed under the Contract was inspected on [Date inspected], and found to be substantially complete. The Date of Substantial Completion of the Work is hereby established as [Date of Substantial Completion]. This is the start date of Warranty.

1.2 WARRANTY PERIOD

The contractor fully warrants its installation, replacement, repair and maintenance of all parts and equipment from the date of acceptance by the City of Houston and the Contractor, which includes installation, testing of parts and equipment for a twelve (12) month period or Manufacturer's warranty offer, whichever is greater.

1.3 CONTRACTOR'S ACKNOWLEDGEMENT

Signature of Contractor, or its agent, acknowledges Warranty Work and the terms of Warranty Period referenced under Warranty of Services, Paragraph 13.0.

Contractor	Signature	Date	
CTR, Wastewater	Signature	Date	
CTR, Drinking Water	Signature	Date	
UDR, Wastewater	Signature	Date	
UDR, Drinking Water	Signature	Date	

SECTION C GENERAL TERMS & CONDITIONS

THE STATE OF TEXAS	BID # S74-L26288
OCUNITY OF HARRIS	ORDINANCE #
COUNTY OF HARRIS	CONTRACT #
I. PARTIES	
1.0 ADDRESS	
THIS AGREEMENT for LOW AND MEDIUM VOLTA	GE ELECTRIC MOTOR REPAIR SERVICES
("Agreement") is made on the Countersignature Date between	veen the CITY OF HOUSTON, TEXAS ("City"), a
Texas home-rule city and	_ ("Contractor or Vendor"), a corporation doing
business in	
The initial addresses of the parties, which one party may of	change by giving written notice to the other party,
are as follows:	
City	Contractor
City Chief Procurement Officer for Director	
of the Fleet Department	
City of Houston	
P.O. Box 1562	Phone:
Houston, Texas 77251	Fax:
The Parties agree as follows:	

2.0 TABLE OF CONTENTS

2.1 This Agreement consists of the following sections:

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EXHIBITS

- * A. DEFINITIONS
- * B. SCOPE OF SERVICES
- * B1-B11EXHIBITS
- * C. EQUAL EMPLOYMENT OPPORTUNITY
- * D. DRUG POLICY COMPLIANCE AGREEMENT
- * E. CERTIFICATION OF NO SAFETY IMPACT POSITIONS
- * F. DRUG POLICY COMPLIANCE DECLARATION
- * G. FEES AND COSTS
- * H. CITY'S CONTRACTORS PAY OR PLAY PROGRAM

3.0 PARTS INCORPORATED

3.1 The above described sections and exhibits are incorporated into this Agreement.

4.0 CONTROLLING PARTS

4.1 If a conflict among the sections or exhibits arises, the Exhibits control over the Sections.

5.0 **DEFINITIONS**

5.1 Certain terms used in this Agreement are defined in Exhibit "A."

^{*} Note: These Exhibits shall be inserted into the contract Agreement at the time of contract execution.

6.0 SIGNATURES

Date

6.1 The Parties have executed this Agreement in multiple copies, each of which is an original. ATTEST/SEAL: (if a corporation) WITNESS: (if not corporation) By: _____ By:_____ Name: Name: Title: Title: Federal Tax ID Number: CITY OF HOUSTON, TEXAS ATTEST/SEAL: Signed by: City Secretary Mayor APPROVED: **COUNTERSIGNED BY:** City Chief Procurement Officer City Controller DATE COUNTERSIGNED: This contract has been reviewed as to form by the undersigned legal assistant and has been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

Legal Assistant

SOLICITATION NO.: S74-L26288

II. DUTIES OF CONTRACTOR

1.0 SCOPE OF SERVICES

1.1 In consideration of the payments specified in this Agreement, Contractor shall provide all supervision, labor, tools, equipment, permits, parts, expendable items, material, and supplies necessary to perform the services described in Exhibit "B" & "BB."

2.0 RELEASE

2.1 PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE CITY) FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

3.0 <u>INDEMNIFICATION</u>

- 3.1 PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY "THE CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:
 - 3.1.1 PRIME CONTRACTOR/SUPPLIER AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 2.1-3.2, "CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS:
 - 3.1.2 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT; AND
 - 3.1.3 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.
 - 3.1.4 PRIME CONTRACTOR/SUPPLIER SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS CONTRACT AND FOR FOUR YEARS AFTER THE CONTRACT TERMINATES. CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$500,000.00 PER OCCURRENCE. CONTRACTOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.
- 3.2 CONTRACTOR SHALL REQUIRE ALL OF ITS SUBCONTRACTORS (AND THEIR SUBCONTRACTORS) TO RELEASE AND INDEMNIFY THE CITY TO THE SAME EXTENT AND IN SUBSTANTIALLY THE SAME FORM AS ITS RELEASE AND INDEMNITY TO THE

CITY.

4.0 INDEMNIFICATION PROCEDURES

- 4.1 <u>Notice of Claims</u>. If the City or Prime Contractor/Supplier receives notice of any claim or circumstances, which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 10 days. The notice must include the following:
 - 4.1.1 a description of the indemnification event in reasonable detail, and
 - 4.1.2 the basis on which indemnification may be due, and
 - 4.1.3 the anticipated amount of the indemnified loss.
- 4.2 This notice does not stop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 10-day period, it does not waive any right to indemnification except to the extent that Prime Contractor/Supplier is prejudiced, suffers loss, or incurs expense because of the delay.

4.3 <u>Defense of Claims</u>

- 4.3.1 <u>Assumption of Defense</u>. Prime Contractor/Supplier may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Prime Contractor/Supplier shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Prime Contractor/Supplier must advise the City as to whether or not it will defend the claim. If Prime Contractor/Supplier does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.
- 4.3.2 Continued Participation. If Prime Contractor/Supplier elects to defend the claim, the City may retain separate counsel to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. Prime Contractor/Supplier may settle the claim without the consent or Agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Prime Contractor/Supplier does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

5.0 INSURANCE

- 5.1 Contractor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement. All policies except Professional Liability and Workers' Compensation must name the City as an additional insured. The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial Size Category of Class VI or better, according to the most current edition Best's Key Rating Guide. Contractor shall maintain the following insurance coverage in the following amounts:
 - 5.1.1 Commercial General Liability insurance including Contractual Liability insurance: \$500,000 per occurrence; \$1,000,000 aggregate

5.1.2 Workers' Compensation including Broad Form All States endorsement: Statutory amount

5.1.3 Automobile Liability insurance

\$1,000,000 combined single limit per occurrence

Defense costs are excluded from the face amount of the policy

Aggregate Limits are per 12-month policy period unless otherwise indicated

5.1.4 Employer's Liability

Bodily injury by accident \$100,000 (each accident)
Bodily injury by disease \$100,000 (policy limit)
Bodily injury by disease \$100,000 (each accident)
\$100,000 (each accident)

- All insurance policies must require by endorsement, that the insurance carrier waives any rights of subrogation against the City, Contractor shall give 30 days written notice to the Director if any of its insurance policies are cancelled, materially changed or non-renewed. Within the 30 day period, Contractor shall provide other suitable policies in lieu of those about to be canceled, materially changed, or non-renewed so as to maintain in effect the required coverage. If Contractor does not comply with this requirement, the Director, at his or sole discretion, may:
 - 5.2.1 immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default, or
 - 5.2.2 purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this Agreement.
 - 5.2.3 All certificates of insurance submitted by Contractor shall be accompanied by endorsements for additional insured coverage in favor of the City for Commercial General Liability and Automobile Liability policies; and waivers of subrogation in favor of the City for Commercial General Liability, Automobile Liability, and Worker's Compensation/Employers' Liability policies. For a list of pre-approved endorsement, forms see http://purchasing.houstontx.gov/forms.shtml. The Director will consider all other forms on a case-by-case basis.

6.0 WARRANTIES

- 6.1 Contractor represents and warrants that it shall perform all work in a good and workmanlike manner, meeting the standards of quality prevailing in Harris County, Texas for work of this kind. Contractor shall perform all work using trained and skilled persons having substantial experience performing the work required under this Agreement.
- 6.2 With respect to any parts and goods furnished by it, Contractor warrants:
 - 6.2.1 that all items are free of defects in title, material, and workmanship,
 - 6.2.2 that each item meets or exceeds the manufacturer's specifications and requirements for the equipment, structure, or other improvement in which the item is installed,
 - 6.2.3 that each replacement item is new in accordance with original equipment manufacturers specifications, and of a quality at least as good as the quality of the item which it replaces (when the replaced item was new), and
 - 6.2.4 that no item or its use infringes any patent, copyright, or proprietary right.

7.0 LICENSES AND PERMITS

7.1 Contractor shall obtain and pay for all licenses, permits, and certificates required by any statute, ordinance, rule, or regulation.

8.0 COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE

8.1 Contractor shall comply with the City's Equal Employment Opportunity Ordinance as set out in Exhibit "C."

9.0 M/WBE COMPLIANCE

- 9.1 Contractor shall comply with the City's Minority and Women Business Enterprise ("M/WBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply Agreements in at least 3.28% of the value of this Agreement to M/WBEs. Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with the Mayor's Office of Business Opportunity (MOBO) and will comply with them.
- 9.2 M/WBE subcontracts must contain the terms set out in Exhibit "D."

10.0 DRUG ABUSE DETECTION AND DETERRENCE

- 10.1 It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by Contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- 10.2 Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
 - 10.2.1 a copy of its drug-free workplace policy,
 - 10.2.2 the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "E," together with a written designation of all safety impact positions, and
 - 10.2.3 if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "F."
- 10.3 If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "G." Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance, and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed, or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.
- 10.4 Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee workforce.
- 10.5 Contractor shall require that its subcontractors comply with the Executive Order, and

Contractor shall secure and maintain the required documents for City inspection.

11.0 ENVIRONMENTAL LAWS

- 11.1 Contractor shall comply with all rules, regulations, statutes, or orders of the Environmental Protection Agency ("EPA"), the Texas Commission on Environmental Quality ("TCEQ"), and any other governmental agency with the authority to promulgate environmental rules and regulations ("Environmental Laws"). Contractor shall promptly reimburse the City for any fines or penalties levied against the City because of Contractor's failure to comply.
- 11.2 Contractor shall not possess, use, generate, release, discharge, store, dispose of, or transport any Hazardous Materials on, under, in, above, to, or from the site except in strict compliance with the Environmental Regulations. "Hazardous Materials" means any substances, materials, or wastes that are or become regulated as hazardous or toxic substances under any applicable federal, state, or local laws, regulations, ordinances, or orders. Contractor shall not deposit oil, gasoline, grease, lubricants or any ignitable or hazardous liquids, materials, or substances in the City's storm sewer system or sanitary sewer system or elsewhere on City Property in violation of the Environmental Laws.

12.0 CITY'S CONTRACTOR PAY OR PLAY PROGRAM

- 12.1 The requirement and terms of the City of Houston Pay or Play Policy, as set out in Executive Order 1-7, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order 1-7 and shall comply with its terms and conditions as they are set out at the time of City Council approval of this Agreement.
- 12.2 The Pay or Play Program for various departments will be administered by the City of Houston Office of Business Opportunity designee and for a Department specific contract; the Department's designated contract administrator will administer the Pay or Play Program.

13.0 CONTRACTOR'S PERFORMANCE

13.1 Contractor shall make citizen satisfaction a priority in providing services under this Agreement. Contractor shall train its employees to be customer service-oriented and to positively and politely interact with citizens when performing contract services. Contractor's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of service to the public. If, in the Director's opinion, Contractor is not interacting in a positive and polite manner with citizens, he or she shall direct Contractor to take all remedial steps to conform to these standards.

14.0 PAYMENT OF EMPLOYEES AND SUBCONTRACTORS

- 14.1 Contractor shall make timely payments in accordance with applicable state and federal law to all persons and entities supplying labor, materials or equipment for the performance of this Agreement including Contractor's employees.
- 14.2 Failure of Contractor to pay its employees as required by law shall constitute a default under this contract for which the Contractor and its surety shall be liable on Contractor's performance bond if Contractor fails to cure the default as provided under this Agreement.
- 14.3 Contractor shall defend and indemnify the City from any claims or liability arising out of Contractors failure to pay its subcontractors as required by law. Contractor shall submit disputes relating to payment of M/WBE subcontractors to arbitration in the same manner as

any other disputes under the M/WBE subcontract.

III. DUTIES OF CITY

1.0 PAYMENT TERMS

- 1.1 The City shall pay and Contractor shall accept fees provided in Exhibit "H" for all services rendered and the Deliverables furnished by Contractor. The fees must only be paid from Allocated Funds, as provided below.
- 1.2 The City of Houston's standard payment term is to pay 30 days after receipt of invoice or receipt of goods or services, whichever is later, according to the requirements of the Texas Prompt Payment Act (Tx. Gov't Code, Ch. 2251). However, the City will pay in less than 30 days in return for an early payment discount from vendor as follows:

Payment Time	Discount	Payment Time	Discount
10 days	2%	20 days	1%

- 1.3 A vendor may elect not to offer a discount for early payment and the City will make payment net 30 days. Discounts will not be considered in the award evaluation.
- 1.4 If the City fails to make a payment according to the early payment schedule above, but does make the pay no other penalty. When the payment date falls on a Saturday, Sunday, or official holiday when City offices are closed and City business is not expected to be conducted, payment may be made on the following business day.

2.0 TAXES

2.1 The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Contractor's invoices to the City must not contain assessments of any of these taxes. The Director will furnish the City's exemption certificate and federal tax identification number to Contractor if requested.

3.0 METHOD OF PAYMENT

3.1 The City shall pay Contractor on the basis of invoices submitted by Contractor and approved by the Director, showing the specific tasks completed in the preceding month and the corresponding prices. The City shall make payments to Contractor at its address for notices within 30 days upon receipt of an approved invoice.

4.0 METHOD OF PAYMENT - DISPUTED PAYMENTS

4.1 If the City disputes any items in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

5.0 LIMIT OF APPROPRIATION:

5.1 The City's duty to pay money to Contractor under this Agreement is limited in its entirety by

the provisions of this Section.

- In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the parties have agreed to the following procedures and remedies:
- 5.3 The City makes a Supplemental Allocation by issuing to Contractor a Service Release Order, or similar form approved by the City Controller, containing the language set out below. When necessary, the Supplemental Allocation shall be approved by motion or ordinance of City Council.

"NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS"

"By the signature below, the City Controller certifies that, upon the request of the responsible Director, the supplemental sum set out below has been allocated for the purposes of the Agreement out of funds appropriated for this purpose by the City Council of the City of Houston. This supplemental allocation has been charged to such appropriation."

5.4 The Original Allocation plus all supplemental allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for services it provides. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement and it has no other remedy in law or in equity against the City and no right to damages of any kind.

6.0 CHANGES

- At any time during the Agreement Term, the City Chief Procurement Officer or Director may issue a Change Order to increase or decrease the scope of services or change plans and specifications, as he or she may find necessary to accomplish the general purposes of this Agreement. Contractor shall furnish the services or deliverables in the Change Order in accordance with the requirements of this Agreement plus any special provisions, specifications, or special instructions issued to execute the extra work.
- 6.2 The City Chief Procurement Officer or Director will issue the Change Order in substantially the following form:

CHANGE ORDER

TO: [Name of Contractor]

FROM: City of Houston, Texas (the "City")

DATE: [Date of Notice]

SUBJECT: Change Order under the Agreement between the City and [Name of

Contractor] countersigned by the City Controller on [Date of

countersignature of the Agreement]

Subject to all terms and conditions of the Agreement, the City requests that Contractor provide the following:

[Here describe the additions to or changes to the equipment or services and the Change Order Charges applicable to each.]

Signed:

[Signature of City Chief Procurement Officer or Director]

- 6.3 The City Chief Procurement Officer or Director may issue more than one Change Order, subject to the following limitations:
 - 6.3.1 Council expressly authorizes the City Chief Procurement Officer or Director to approve a Change Order of up to \$50,000. A Change Order of more than \$50,000 over the approved contract amount must be approved by the City Council.
 - 6.3.2 If a Change Order describes items that Contractor is otherwise required to provide under this Agreement, the City is not obligated to pay any additional money to Contractor.
 - 6.3.3 The total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.
- 6.4 Whenever Contractor receives a Change Order, Contractor shall furnish all material, equipment, and personnel necessary to perform the work described in the Change Order. Contractor shall complete the work within the time prescribed. If no time for completion is prescribed, Contractor shall complete the work within a reasonable time. If the work described in any Change Order causes an unavoidable delay in any other work Contractor is required to perform under this Agreement, Contractor may request a time extension for the completion of the work. The City Chief Procurement Officer's or Director's decision regarding a time extension is final.
- 6.5 A product or service provided under a Change Order is subject to inspection, acceptance, or rejection in the same manner as the work described in the Original Agreement, and is subject to the terms and conditions of the Original Agreement as if it had originally been a part of the Agreement.
- 6.6 Change Orders are subject to the Allocated Funds provisions of this Agreement.

IV. TERM AND TERMINATION

1.0 CONTRACT TERM

1.1 This Agreement is effective on the Countersignature Date and expires three (3) years after the starting date specified in the Notice to Proceed unless sooner terminated according to the terms of this Agreement.

2.0 NOTICE TO PROCEED

2.1 Contractor shall begin performance under this Agreement on the date specified in a Notice to Proceed from the City Chief Procurement Officer.

3.0 RENEWALS

3.1 Upon expiration of the Initial Term, and so long as the City makes sufficient supplemental allocations, this Agreement will be automatically renewed for two successive one-year terms on the same terms and conditions. If the Director/Chief of the City Department elects not to

renew this Agreement, the City Chief Procurement Officer shall notify Contractor in writing of non-renewal at least 30 days before the expiration of the then current term.

4.0 TIME EXTENSIONS

4.1 If Department requests an extension of time to complete its performance, then the City Chief Procurement Officer may, in his or her sole discretion, extend the time so long as the extension does not exceed 180 days. The extension must be in writing but does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

5.0 TERMINATION FOR CONVENIENCE BY THE CITY

- 5.1 The City Chief Procurement Officer or Director may terminate this Agreement at any time by giving 30 days written notice to Contractor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies, which exist now or in the future.
- 5.2 On receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Contractor for services actually performed, but not already paid for, in the same manner as prescribed in Section III unless the fees exceed the allocated funds remaining under this Agreement.
- 5.3 TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

6.0 TERMINATION FOR CAUSE BY CITY

- 6.1 If Contractor defaults under this Agreement, the City Chief Procurement Officer or Director may either terminate this Agreement or allow Contractor to cure the default as provided below. The City's right to terminate this Agreement for Contractor's default is cumulative of all rights and remedies, which exist now or in the future. Default by Contractor occurs if:
 - 6.1.1 Contractor fails to perform any of its duties under this Agreement;
 - 6.1.2 Contractor becomes insolvent;
 - 6.1.3 All or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
 - 6.1.4 A receiver or trustee is appointed for Contractor.
- 6.2 If a default occurs, the City Chief Procurement Officer or Director may, but is not obligated to, deliver a written notice to Contractor describing the default and the termination date. The City Chief Procurement Officer or Director, at his or her sole option, may extend the termination date to a later date. If the City Chief Procurement Officer or Director allows Contractor to cure the default and Contractor does so to the City Chief Procurement Officer's or Director's

satisfaction before the termination date, then the termination is ineffective. If Contractor does not cure the default before the termination date, then the City Chief Procurement Officer or Director may terminate this Agreement on the termination date, at no further obligation of the City.

6.3 To effect final termination, the City Chief Procurement Officer or Director must notify Contractor in writing. After receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

7.0 TERMINATION FOR CAUSE BY CONTRACTOR

- 7.1 Contractor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Contractor wishes to terminate the Agreement, then Contractor must deliver a written notice to the Director describing the default and the proposed termination date.
- 7.2 The date must be at least 30 days after the Director receives notice. Contractor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date, then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Contractor may terminate its performance under this Agreement on the termination date.

8.0 REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS

8.1 Upon expiration, or termination of this Agreement, Contractor is permitted ten (10) days within which to remove contractor-owned material and equipment from the City's premises. The City shall make such material and equipment readily available to Contractor. The time period may be extended upon approval by the Director. The City reserves the right to deny any extension of time.

V. MISCELLANEOUS

1.0 INDEPENDENT CONTRACTOR

1.1 Contractor shall perform its obligations under this Agreement as an independent Contractor and not as an employee of the City.

2.0 FORCE MAJEURE

- 2.1 Timely performance by both parties is essential to this Agreement. However, neither party is liable for delays or other failures to perform its obligations under this Agreement to the extent the delay or failure is caused by Force Majeure. Force Majeure means fires, floods, explosions, and other acts of God, war, terrorist acts, riots, court orders, and the acts of superior governmental or military authority.
- 2.2 This relief is not applicable unless the affected party does the following:
 - 2.2.1 uses due diligence to remove the Force Majeure as guickly as possible, and
 - 2.2.2 provides the other party with prompt written notice of the cause and its anticipated

effect.

- 2.3 The City may perform contract functions itself or contract them out during periods of Force Majeure. Such performance does not constitute a default or breach of this Agreement by the City.
- 2.4 If the Force Majeure continues for more than 30 days, the City Chief Procurement Officer or Director may terminate this Agreement by giving 30 days written notice to Contractor. This termination is not a default or breach of this Agreement. CONTRACTOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE TERMINATION EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT AT THE TIME OF THE TERMINATION.

3.0 **SEVERABILITY**

3.1 If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

4.0 ENTIRE AGREEMENT

4.1 This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind exist between the Parties regarding this Agreement.

5.0 WRITTEN AMENDMENT

5.1 Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance duly adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

6.0 APPLICABLE LAWS

- This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.
- 6.2 Venue for any litigation relating to this Agreement is Harris County, Texas.

7.0 NOTICES

7.1 All notices to either party to the Agreement must be in writing and must be delivered by hand, facsimile, United States registered or certified mail, return receipt requested, United States Express Mail, Federal Express, Airborne Express, UPS or any other national overnight express delivery service. The notice must be addressed to the party to whom the notice is given at its address set out in Section I of this Agreement or other address the receiving party has designated previously by proper notice to the sending party. Postage or delivery charges must be paid by the party giving the notice.

8.0 NON-WAIVER

- 8.1 If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.
- 8.2 An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

9.0 INSPECTIONS AND AUDITS

9.1 City representatives may perform, or have performed, (1) audits of Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. Contractor shall keep its books and records available for this purpose for at least 4 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

10.0 ENFORCEMENT

10.1 The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

11.0 AMBIGUITIES

11.1 If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

12.0 SURVIVAL

12.1 Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

13.0 PARTIES IN INTEREST

13.1 This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

14.0 SUCCESSORS AND ASSIGNS

14.1 This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

15.0 BUSINESS STRUCTURE AND ASSIGNMENTS

- 15.1 Contractor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the City Chief Procurement Officer's or Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest under Section 9.406(c) of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.
- 15.2 Contractor shall not delegate any portion of its performance under this Agreement without the City Chief Procurement Officer's or Director's prior written consent.

16.0 REMEDIES CUMULATIVE

16.1 Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

17.0 CONTRACTOR DEBT

17.1 If Contractor, at any time during the term of this Agreement, incurs a debt, as the word is defined in Section 15-122 of the Houston City Code of Ordinances, it shall immediately notify the City Controller in writing. If the City Controller becomes aware that Contractor has incurred a debt, she shall immediately notify Contractor in writing. If Contractor does not pay the debt within 30 days of either such notification, the City Controller may deduct funds in an amount equal to the debt from any payments owed to Contractor under this Agreement, and Contractor waives any recourse therefore.

EXHIBIT A [DEFINITIONS]

As used in this Agreement, the following terms have the meanings set out below:

"Agreement" means this contract between the Parties, including all exhibits, change orders, and any written amendments authorized by City Council and Contractor.

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"City Chief Procurement Officer" is defined as the person or duly authorized successor, authorized in writing to act for the City. The term includes, except as otherwise provided in this Contract, the authorized representative of the City Chief Procurement Officer acting within the limits of delegated authority.

"Contract Award Notice" means the official notification substantiated by the Notice to Proceed issued by the City Chief Procurement Officer to the Contractor.

"Contract Charges" means charges that accrue during a given month as defined in Article III.

"Contract Term" is defined in Article IV.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Countersignature Date" means the date this Agreement is countersigned by the City Controller.

"Director" mean the Directors/Chiefs of each of the Departments or the City Chief Procurement Officer for the City, or the person he or she designates.

"Effective Date" is defined as date contract is countersigned by the City Controller.

"Governing Body" means the Mayor and City Council of the City of Houston.

"Hazardous Materials" is defined in Article II (Environmental Laws).

"Notice to Proceed" means a written communication from the City Chief Procurement Officer to Contractor instructing Contractor to begin performance.

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

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EXHIBIT B SCOPE OF SERVICES

EXHIBIT C [EQUAL EMPLOYMENT OPPORTUNITY]

- 1. The contractor, subcontractor, vendor, supplier, or lessee will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The contractor, subcontractor, vendor, supplier, or lessee will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The contractor, subcontractor, vendor, supplier or lessee agrees to post in conspicuous places available to employees, and applicants for employment, notices to be provided by the City setting forth the provisions of this Equal Employment Opportunity Clause.
- 2. The contractor, subcontractor, vendor, supplier, or lessee states that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, national origin or age.
- 3. The contractor, subcontractor, vendor, supplier, or lessee will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the said labor union or worker's representative of the contractor's and subcontractor's commitments under Section 202 of Executive Order No. 11246, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The contractor, subcontractor, vendor, supplier, or lessee will comply with all provisions of Executive Order No. 11246 and the rules, regulations, and relevant orders of the Secretary of Labor or other Federal Agency responsible for enforcement of the equal employment opportunity and affirmative action provisions applicable and will likewise furnish all information and reports required by the Mayor and/or Contractor Compliance Officer(s) for purposes of investigation to ascertain and effect compliance with this program.
- 5. The contractor, subcontractor, vendor, supplier, or lessee will furnish all information and reports required by Executive Order No. 11246, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to all books, records, and accounts by the appropriate City and Federal Officials for purposes of investigations to ascertain compliance with such rules, regulations, and orders. Compliance reports filed at such times as directed shall contain information as to the employment practice policies, program, and work force statistics of the contractor, subcontractor, vendor, supplier, or lessee.
- 6. In the event of the contractor's, subcontractor's, vendor's, supplier's, or lessee's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor, subcontractor, vendor, supplier, or lessee may be declared ineligible for further City contracts in accordance with procedures provided in Executive Order No. 11246, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as may otherwise be provided by law.
- 7. The contractor shall include the provisions of paragraphs 1-8 of this Equal Employment Opportunity Clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event the contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
- 8. The contractor shall file and shall cause his or her subcontractors, if any, to file compliance reports with the City in the form and to the extent as may be prescribed by the Mayor. Compliance reports filed at such times as directed shall contain information as to the practices, policies, programs, and employment policies and employment statistics of the contractor and each subcontractor.

SOLICITATION NO.: S74-L26288

EXHIBIT D [DRUG POLICY COMPLIANCE AGREEMENT]

SOLICITATION NO.: S74-L26288

EXHIBIT E

[CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS IN PERFORMANCE OF A CITY CONTRACT]

(Name - Print/Type)	(Title)
employee safety impact positions as operforming this City Contract. Contract	(Contractor with respect to its bid, and I hereby certify that Contractor has noted defined in §5.18 of Executive Order No. 1-31 that will be involved in ctor agrees and covenants that it shall immediately notify the City act positions are established to provide services in performing this Cit
Date	Contractor Name
	Signature
	Title
than fifteen (15) employees during any has no employee safety impact position in performing this City Contract. Safety job duties that if performed with inatten	(Contractor with respect to its bid, and I hereby certify that Contractor has fewer 20-week period during a calendar year and also certify that Contractor has as defined in §5.18 of Executive Order No. 1-31 that will be involved impact position means a Contractor's employment position involving tiveness, errors in judgment, or diminished coordination, dexterity, could present a real and/or imminent threat to the personal health of d/or the public.
Date	Contractor Name
	Signature
	Title

SOLICITATION NO.: S74-L26288

EXHIBIT F [DRUG POLICY COMPLIANCE DECLARATION]

SOLICITATION NO.: S74-L26288

EXHIBIT G
[FEES AND COSTS]

SOLICITATION NO.: S74-L26288

EXHIBIT H [PAY OR PLAY]